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AN EDUCATIONAL SURVEY OF A
SUBURBAN AND RURAL COUNTY
MONTGOMERY COUNTY, MD.

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and

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CONTENTS.

	Page
Letter of transmittal.....	5
Introduction.....	7
Location and topography.....	7
CHAPTER I. ECONOMIC, SOCIAL, AND RELIGIOUS CONDITIONS.	
I. Economic conditions.....	9
II. Cooperative tendencies in farming.....	12
III. Land development for suburban purposes.....	13
IV. Transportation and markets.....	13
V. Population.....	13
VI. Social mind.....	14
VII. Recreations.....	16
VIII. The Sandy Spring neighborhood.....	17
IX. Religious conditions and activities.....	19
CHAPTER II. EDUCATIONAL CONDITIONS.	
I. General features.....	23
II. Schools for white children.....	24
III. Schools for colored children.....	40
IV. The school budget.....	46
V. Private educational institutions.....	49
CHAPTER III. PATRONS OF THE PUBLIC SCHOOLS.....	51
CHAPTER IV. SUMMARY AND RECOMMENDATIONS.....	58
APPENDIX.....	63

ILLUSTRATIONS.

	Page.
PLATE 1A. A Sandy Spring home.....	Frontispiece.
1B. A Sandy Spring home and the high school.....	Frontispiece.
2A. Episcopal church at Laytonville.....	20
2B. Colored church at Rockville.....	20
3A. The Laytonville school.....	28
3B. The Clarksburg school.....	28
4A. Colored school, lodge hall, and church, Norbeck.....	40
4B. Norbeck colored school.....	40
5A and B. Typical colored schools.....	40
6A. The Gaithersburg high school.....	48
6B. The Poolesville consolidated school.....	48
7A. The Rockville academy.....	48
7B. Domestic science building, Brookeville high school.....	48
FIGURE 1. Location of churches.....	20
2. Location of schools.....	25
3. Proportion of one-teacher schools.....	27
4. Enrollment by grades in the schools for white children.....	32
5. Enrollment in public schools.....	35
6. Average attendance.....	35
7. Proportion of one-teacher schools among the colored.....	41
8. Enrollment by grades in the schools for colored children.....	43

LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,

Washington, June 23, 1913.

SIR: There is great need of accurate information in regard to educational conditions in rural communities throughout the country. The ordinary statistics of rural schools and other agencies of education and their results give only averages and fail to tell the truth about any particular agency or result. Much good would come from a complete educational survey of the United States, and such a survey should be made. But it would cost many thousands of dollars and is far beyond the resources of this bureau. The best the bureau can now do is to make surveys of a few typical counties, districts, and townships, in cooperation with local school officers and such other agencies as are available. The results of these will have general value, because they reveal real conditions in typical communities.

The accompanying manuscript gives results of an educational survey of Montgomery County, Md. This county adjoins the District of Columbia and contains some of the new suburbs of Washington City. Otherwise it is a typical agricultural county of this section. This survey is a part of a larger undertaking—a general sociological survey, including a study of economic, social, and religious activities and conditions—made by the department of church and country life of the board of home missions of the Presbyterian Church in the United States of America. All the more important results of the survey, except those relating to education, have been published by the board in a bulletin entitled "A Rural Survey in Maryland."

In the educational survey the investigators of the board were assisted by the division of rural education of this bureau. The investigators visited most of the schools of the county, and then supplemented their first-hand information from the records of the county board of education, the county commissioner, and from written reports and conversations of teachers and parents. The material was prepared for publication by H. N. Morse, one of the board's investigators, and Mr. A. C. Monahan, of this bureau. A brief summary of the economic, social, and religious conditions has

been included, because of their intimate relation to education. An account of the methods of the survey is included because of the suggestions it offers for those who may wish to conduct local surveys elsewhere.

I recommend that the manuscript be published as a bulletin of the Bureau of Education.

Respectfully submitted.

P. P. CLAXTON,
Commissioner.

THE SECRETARY OF THE INTERIOR.

AN EDUCATIONAL SURVEY OF A SUBURBAN AND RURAL COUNTY—MONTGOMERY COUNTY, MD.

INTRODUCTION.

In September, 1911, the Montgomery County Country Life Committee was organized, with a membership of 53 men and women, residents of the county, who were interested in the problems of rural life. The first work of the committee, without which no other could well be undertaken, was to determine the exact status of affairs in the county. Its first official act was to decide upon a sociological survey, in order that there might be obtained, as a scientific basis for future work of improvement, accurate information concerning the prevailing economic, social, educational, and religious conditions. The department of church and country life of the board of home missions of the Presbyterian Church in the United States of America was invited to make the survey. Two field investigators of said department, E. Fred Eastman and H. N. Morse, were subsequently detailed for this work, which was begun in January, 1912, and finished in April of the same year.

The survey as finally completed dealt with eight main topics, viz, topography and location, economic conditions, population, social mind, recreation and morals, education, religious conditions and activities, and social welfare. The department making the survey has issued a bulletin including the principal material gathered. However, the educational conditions are discussed only briefly. The present report is intended to supplement the other, giving a full account of the educational conditions and a very brief résumé of the material collected on other topics.

LOCATION AND TOPOGRAPHY.

Montgomery County, Md., lies along the north bank of the Potomac River from the District of Columbia to the Monocacy River. The adjoining Maryland counties are Frederick, Howard, and Prince Georges. The District of Columbia and Loudoun and Fairfax Counties, Va., form the remainder of its boundary line. Its area is 521 square miles.

The county is divided into 13 minor civil divisions, called "election districts." These are, in the order of their numerical sequence, Laytonsville, Clarksburg, Poolesville, Rockville, Colesville, Darnestown,

Bethesda, Olney, Gaithersburg, Potomac, Barnesville, Damascus, and Wheaton. The town of Rockville, in the Rockville district, is the county seat.

In general the land is high, and its surface is rolling, in some sections quite hilly. The average height above mean sea level for the whole county is approximately 431.5 feet, the highest point being in the Damascus district, 822 feet. The centers of population are almost without exception the highest points in their respective neighborhoods, the towns being for the most part so situated that the land slopes off in every direction. The county has much picturesque scenery. Not alone from such special features as the Great Falls of the Potomac and the Cabin John Bridge, one of the longest single-span stone bridges in the world, but from the general contour of the land, rolling, partially wooded, and capably farmed by an intelligent people, is its beauty derived.

Chapter I.

ECONOMIC, SOCIAL, AND RELIGIOUS CONDITIONS.

I. GENERAL ECONOMIC CONDITIONS.

Montgomery County is and always has been primarily an agricultural county. At the present time a portion of it is passing through a period of economic transition, which is making it less and less dependent upon agriculture; but, for at least two-thirds of the total area, it will doubtless continue indefinitely to be true that its prosperity depends upon the success of its farming operations.

Its agricultural history is similar to that of many farming communities in the eastern States. It is a history of rich land and abundant crops, exhausting cultivation, ultimate soil depletion, and a long period of slowly and painfully winning the land back to fertility. More than a century of unremitting culture of the staple crops of tobacco and corn sapped the strength from the soil until it became practically useless for farming purposes. In consequence, during the early years of the nineteenth century, a tide of emigration flowed steadily from the county toward the newer lands of the West. In four decades its population showed a net decrease of over 14 per cent. Land values dropped very low. About 1835, in the neighborhood of Sandy Spring, experiments were begun with various forms of chemical fertilizers—lime, Peruvian guano, and bone dust. The improvement in the yield was immediate and pronounced, and the use of these and other fertilizers soon became quite general. Under the influence of fertilization, aided by a gradual change to rotative cropping, the fertility of the soil was restored. The population increased, and during the next four decades made a net gain of about 55 per cent.

Economic resources.—The mineral resources are chiefly two, gold and building stone; each is important, but neither is important enough ever to displace farming as the great means of wealth production in the county. There are two gold mines near the Great Falls which have been worked intermittently since 1887. From \$40,000 to \$50,000 worth of gold is said to have been taken from them to date. Marketable stone, suitable for building purposes or for road building, is found in at least five districts, and several quarries have been opened.

For the county as a whole the soil is chiefly adapted to the raising of corn, wheat, and forage crops. In certain districts these staples

are supplemented by oats, rye, tobacco, potatoes, garden vegetables, small fruits, and apples.

The farming assets.—The total land area of the county is approximately 333,440 acres; 273,270 acres, or 82 per cent of the total, are in farms; 209,153 acres, 76.5 per cent of the farm land, are improved. Of the remaining 64,117 acres, 59,409 acres are in woodland, leaving only 4,708 acres neither wooded nor improved. The total value of all farm property is about \$21,000,000, an increase of over 38 per cent in 10 years. The following table from the 1910 United States Census shows how this value is distributed:

Land in 1910.....	\$12, 678, 278
In 1900.....	9, 491, 930
Buildings in 1910.....	5, 163, 580
In 1900.....	3, 525, 170
Implements and machinery in 1910.....	733, 843
In 1900.....	576, 010
Domestic animals, poultry, etc., in 1910.....	2, 282, 768
In 1900.....	1, 486, 558
Per cent of value of all property in—	
Land.....	60.8
Buildings.....	24.8
Implements and machinery.....	3.5
Domestic animals, poultry, etc.....	10.9
Average values (number of all farms, 2,442):	
All property per farm.....	\$8, 542
Land and buildings per farm.....	7, 306
Equipment and stock.....	1, 236

The Census Office estimated the average value of land per acre for the total farming area of the county as \$46.39, as against \$33.48 in 1900, an increase of 38.3 per cent.

There are in all 2,442 farms in the county, of which 2,093, or 85.7 per cent, are operated by white farmers, and 349, or 14.3 per cent, are operated by colored farmers. At present the average size for all farms is about 112 acres, but the tendency is toward smaller farms; 39 per cent of all farms have less than 50 acres each. The farms operated by negroes are smaller on the average than those operated by the whites; 69.3 per cent of all colored farmers have 19 acres or less.

A study of the kind of tenure reveals some significant facts. Three-fourths of all farms are operated by those who own the land in whole or in part. The proportion of owners among the colored farmers is larger than among the white. For the whole county, there has been a slight increase in the amount of tenancy during 10 years; in at least two districts—Laytonsville and Potomac—this increase has been considerable, and has meant a poorer grade of farming, less profitable farming, and the gradual depreciation of the soil. On the

face of the returns, the per cent of farms operated by owners, 75.4 per cent, seems like a fair proportion. These farms, however, represent only 55 per cent of the total acreage of farm lands. A higher proportion of the large farms are subject to absentee landlordism than of the small farms. Of the farms of 19 acres or less, 88.6 per cent are operated by owners; of those of 20 to 99 acres, 74.5 per cent are so operated; of those of 100 to 259 acres, 60.3 per cent; of those of more than 259 acres, 51.8 per cent. The points involved in these figures which should cause concern are these: Forty-five per cent of all farm land is operated under a tenant system, which means poorer farming and the gradual impoverishment of the soil; 25 per cent of the entire farming population is shifting and constitutes an unstable element in the community, with an average period of tenure of only 4 years as against 15 years for farm owners, a fact which must inevitably hamper all efforts toward the betterment of rural life conditions along social, religious, and educational lines.

The output of the farms.—The 1910 census gives the following table of the acreage and yield of the principal crops for the year 1909:

Crops.	Acrea.	Yield.
Corn.....	39,278	1,380,249 bushels.
Oats.....	1,169	22,276 bushels.
Wheat.....	45,112	769,289 bushels.
Rye.....	3,549	40,661 bushels.
Potatoes.....	2,395	193,783 bushels.
Tobacco.....	587	534,314 pounds.
Hay and forage.....	25,906	30,094 tons.

In two-thirds of the county stock feeding is an important source of income. Laytonsville, Gaithersburg, and Olney districts lead in this respect. Stock breeding is not carried on extensively anywhere in the county except to replenish the string of draft horses or keep up the dairy herds. In the eastern and southern end of the county and along the entire length of the Baltimore & Ohio Railroad, dairying is an important industry. There are at present from 10,000 to 12,000 dairy cows in the county.

Much of the county is well adapted to raising fruits, particularly apples. Within a few years many young orchards have been set out, particularly in the vicinity of Sandy Spring. This is still for the most part an industry of the future, but it will doubtless become increasingly important. Along the line of the railroad and in all sections which have ready access to the District of Columbia there is a great deal of market gardening for the Washington City market. Here eggs also are an important product.

Farm labor.—Most of the farm labor in the county is colored. The wage for day labor varies from 75 cents and board to \$1.50, the aver-

age being about \$1. Labor by the month costs from \$12, with house and allowance, to \$30, the average being about \$18. In general it is difficult to obtain sufficient help of any sort, and good labor is particularly scarce. The laborers have apparently very slight chance of economic advancement; very few are reported to have acquired farms anywhere in the county during the past 10 years.

II. COOPERATIVE TENDENCIES IN FARMING.

The farmers of the county have taken the first steps toward forming cooperative organizations. The Tobacco Growers' Association, which includes the tobacco growers of Frederick, Howard, Carroll, and Montgomery Counties, was organized seven years ago. Its work has been largely educational: The encouragement of better methods for the production and care of tobacco, the advocacy of honest packing, the investigation of market conditions, and the recommendation to its members of some reliable firm to handle their output. Since its organization the crop yield has almost doubled, through the improved methods of cultivation, and the price has been increased about one-third by gaining the confidence of the buyers in the quality of the tobacco and the fairness of its packing.

The Milk Producers' Association of Maryland, Virginia, and the District of Columbia represents about 20,000 dairy cows, of which at least two-fifths are in Montgomery County. Its work is to secure better legislation, encourage improved methods of handling the herds, and, in general, to better the conditions under which dairymen work. No effort has been made to fix prices or sell the milk through an agent.

The Sandy Spring Fruit Growers' Association was recently formed with 26 members, representing about 15,000 trees, mostly in young orchards. For the present its work is educational.

The grange, outside of the Sandy Spring neighborhood, has not yet gained a very strong hold upon the farmers of the county. There are but three branches in the county, two of which are in the Olney district. It has, through its executive committee, undertaken to do a considerable amount of cooperative buying, chiefly of farm implements, home furnishings, and fertilizer.

There is an annual farmers' convention held at Sandy Spring, which for 40 years has been bringing together a limited number of the farmers of the county for the open discussion of all the problems of farm operation and community life. These gatherings are more representative of Sandy Spring than of the entire county, but they have come to have considerable importance for those who attend them.

The County Fair Association has an open membership of over 2,000. It owns large fair grounds at Rockville and holds an annual fair in September of every year.

III. LAND DEVELOPMENT FOR SUBURBAN PURPOSES.

In the lower end of Montgomery County, where it adjoins the District of Columbia, the conditions are almost ideal for suburban development. Development has already taken place to a considerable extent, chiefly in the Wheaton and Bethesda districts. In Wheaton about one-half of the arable land is still farmed, but in Bethesda practically all of the land that has not already been subdivided has either been bought up and is held awaiting development, or is valued at so high a figure that farming is no longer profitable.

IV. TRANSPORTATION AND MARKETS.

The transportation mediums which are important in this county are the Metropolitan and Southern Metropolitan branches of the Baltimore & Ohio Railroad, the Chesapeake & Ohio Canal, the trolley lines, and the roads.

The Metropolitan branch passes through five districts and is more or less conveniently available to practically two-thirds of the county. The Chesapeake & Ohio Canal parallels the Potomac River on the Montgomery County side for the entire length of the county line. The trolley lines and the Southern Metropolitan branch of the Baltimore & Ohio are of value chiefly to the suburbanites and the farmers in the southern end of the county. The total number of miles of road in the county is 830; 99 miles of this total is stone road of varying degrees of excellence; 24 miles of the stone road is a part of an old toll-road system. The rest of the stone road is State and county built, is relatively new, and for the most part in good condition.

In general, it may be said that the market for Montgomery County is the city of Washington, which affords ample and accessible market for all of its products, except the tobacco crop, which is all shipped to Baltimore.

V. POPULATION.

The total population of the county is given by the last census as 32,089, an increase for the decade of 1900-1910 of 5.4 per cent. Of this population, 84.6 per cent live in the open country; 8.1 per cent live in villages of from 100 to 750 inhabitants; 7.33 per cent live in towns of more than 750 inhabitants. For the county as a whole, the open-country population is decreasing, while the village and town population is increasing. Of the population, 28.8 per cent is colored. The figures for the county are, white, 22,847; colored, 9,235; other nonwhites, 7. Probably 75 per cent of the colored population is found either in settlements or villages through

the county or in colored sections of the larger towns. Olney district has a larger proportion than any other one district.

Total population.....	32,089
Per cent living in open country.....	84.6
In villages of from 100 to 750 inhabitants.....	8.1
In villages of more than 750 inhabitants.....	7.3
White population.....per cent..	71.2
Negro population.....do....	28.8

VI. SOCIAL MIND.

Means of transportation and communication.—The problem of rural isolation, important from many points of view, is fundamentally related to the problem of developing the social life of the community. Adequate means of communication are of the same primary significance socially that adequate means of transportation are economically. In general, this isolation is beginning to be broken down by the development of means of communication, which not only bring the communities closer together, but unite them more closely with the outside world, bringing them in touch with many forces and influences making for progress, and bestowing upon them many by-products of city civilization in the way of culture, education, comfort, and efficiency.

First are mentioned again the railroad and the trolley lines. Six trolley lines enter the county from the south, one running as far as Rockville, and the others connecting the various towns in the Bethesda and Wheaton districts with the District of Columbia. There are also two stage lines, one of which connects Poolesville with the Baltimore & Ohio Railroad at Barnesville Station, while the other connects Ashton with the Baltimore & Ohio at Laurel.

It is difficult to overestimate the social significance of good roads. It is not the social needs of the community which build the roads, but its economic needs. But once they are built, they must inevitably extend the limits of the community by increasing the distance which it is possible comfortably to travel for social intercourse and for attendance upon public gatherings, churches, and schools. They must also increase the solidarity of the community and strengthen its social bonds by facilitating intercommunication. In Montgomery County it will be found that the development of the social life has followed very closely the development of the system of good roads.

The advent of the rural free delivery and of the telephone has also been of great social value; 38 rural delivery routes start either within the county or from towns adjacent thereto, reaching practically all the farmers not conveniently served by the local post offices. There are approximately 1,250 telephones in the county; probably 35 per cent of the homes of white farmers are equipped with them.

Social welfare.—The vitality of the white population of the county is in general very high. The vitality of the colored population is relatively low. There is a county health officer who has general oversight over the public health for the entire county, except the Olney district and the town of Takoma Park. The Olney district has its local board of health, chartered by the State legislature. Health conditions in the town of Takoma Park are under the supervision of the health department of the District of Columbia.

The birth rate in 1912 for the white population of the county was 14.8 per 1,000 inhabitants. For the colored population, it was 15.3 per 1,000. The death rate was 7.8 for whites and 14.5 for the negroes. This birth rate is rather low, but the death rate is also low. It is significant that the death rate of the negroes is almost double that of the whites, while the birth rate is only slightly higher.

There are four large well-equipped sanitariums in the county; one of these is devoted to the open-air treatment of all forms of tuberculosis; a second is given over to the treatment of nervous and mental diseases; the other two are general in their scope. There are 42 physicians practicing within the county.

The average age of marriage among the white population is 25.7 years for the men and 21.6 years for the women. For the colored population the ages are respectively 28.5 and 22.2 years. These averages, as compared with the averages in most agricultural communities, are high.

The housing conditions in the county would compare very favorably with those in any other county similarly situated. The homes of the farm owners average 7 or 8 rooms; 95 per cent of the homes are painted. A large proportion of them are either two or three stories. A fair number are supplied with running water by windmill, ram, or engine. Sanitary conditions are usually excellent.

The homes of the farm tenants are on the average not so good. Probably not more than 50 per cent of them are painted. The homes of the colored farmers are well above the average for colored farmers in other sections of the country.

Organizations.—There are 29 local branches of secret organizations, representing 9 orders. These are located in 12 districts, every district but Barnesville having at least one. The aggregate membership is 1,744; the attendance at the meetings of the societies is about 15 per cent of the membership. The social importance of these organizations is not usually very great.

There are 40 open fraternal organizations having a total membership of about 1,000. This total excludes the societies of the Sandy Spring neighborhood, and also certain organizations which are of more than local importance. These will be discussed in subsequent paragraphs. It also excludes three country clubs in the Bethesda

district with a membership of 1,938, which draw their patronage largely from without the county.

The 40 clubs mentioned include farmers' clubs, improvement associations, card, social, literary, temperance, scientific, and athletic societies. Four districts—Clarksburg, Potomac, Barnesville, and Damascus—are apparently without organizations of this sort.

The social organization of the county is highly uneven, both as regards the geographical distribution of these societies and the classes in the communities which they reach. Fifty-seven per cent of the existing organizations are in the suburban sections. All of the scientific clubs and the citizens' improvement associations are there. The best-organized localities are in general those with the best transportation facilities, the best roads, and the most compact social groups.

Only a small proportion of the population is in any instance provided for by those organizations. There are none of any sort for the laboring and tenant classes. The existing societies are those of the farm owner and the town dweller.

There are a great number of negro clubs and associations in the county. Many of these are prosperous benevolent societies, which care for their members when sick, bury the dead, and look after their families. The social significance of many of these clubs for the life of their members is without doubt very great, but they are too numerous for detailed examinations of them to be made.

VII. RECREATIONS.

Types of recreations.—Baseball is played generally throughout the county. The larger schools have organized teams, and there were last season 8 organized town teams playing one game each per week. These games were usually attended by a crowd of 100 or more. In all districts there is more or less unorganized scrub playing. Basketball is played in several of the schools and there are two town teams. Football and soccer are played to a limited extent. Track work is popular in some sections. Several of the schools occasionally enter teams in State meets. An annual meet is held during the summer at Washington Grove, which has come to be an important event, attracting athletes from all neighboring States. Tennis is popular in at least six districts. Tournaments are often held, both for particular sections and for the county.

There is very little commercial drama at any time in the county, hardly more than one or two inexpressibly poor shows a year. Entertainment is provided by one moving-picture theater in Rockville. Home-talent plays and minstrel shows are, however, very popular, and are generally well supported.

There are not many public dances held anywhere in the county, but there are very many private, semi-invitation dances during the

winter in almost every district. These are held in town, lodge, and grange halls, in clubhouses, and in private homes.

Outside of the Washington Grove Summer Chautauqua and some of the towns in the Wheaton district; lectures and public entertainments by outside talent are, not much in vogue anywhere in the county. There are more oyster suppers, strawberry festivals, and lawn parties than any other form of entertainment. Practically every organization in the county which requires money gives them. For the support of the churches and lodges, the strawberry and the oyster may be termed the first aids to the budget. There are also probably 30 or 40 lodge and church fairs held during the year and twice that number of public picnics. The picnics are especially popular, and are almost everywhere an important factor in the social life of the community. Many features are combined with them, such as athletics, dancing, sales, and sometimes raffles and similar money-making devices.

Washington Grove, in the Gaithersburg district, is the only strictly summer resort in the county. Among its annual features are a Chautauqua program of 12 lectures, concerts, and entertainments, an athletic carnival, and a 10-day camp meeting. There is a large amusement park at Glen Echo in the Bethesda district. Cabin John and Chevy Chase Lake are popular resorts during the summer. These last draw much of their patronage from Washington.

Agencies furnishing recreation facilities.—Under this head it must be noted that there is apparently no organization in the county which feels impelled to furnish recreative facilities out of any sense of its obligations to the community. It is not a desire for service, but the need for money, that pushes the church and lodge into this field. The fact that they do perform a public service in furnishing recreation is quite incidental to the fact that they find it a convenient way to raise funds and, hence, as a regular policy, exploit recreation for the sake of their treasuries. Such facilities as do not owe their existence to this circumstance are the result of the efforts of individuals or groups organized for that purpose, such as card clubs, athletic associations, etc. The result of this must be that those who, because of economic disability, lack of personal initiative due to the conditions of their life, or some other cause, can not provide their own recreation facilities are left without them. These, too, are the classes upon which the church and the lodge have the slightest hold, and are, generally speaking, the classes most in need of their ministrations in this regard.

VIII. THE SANDY SPRING NEIGHBORHOOD.

The territory included in the "Sandy Spring neighborhood" lies partly within the Olney and partly within the Colesville districts.

The term "neighborhood" is used advisedly. Sandy Spring is not a town or village or civil division of any sort. It is 10 miles from any town or railroad. It is nothing more nor less than a section of open farming country settled by a group of people who are united by the bonds of religion and blood kinship and contrasted more or less sharply with the people of the adjoining territory by differences of thought, feeling, and custom. The first settlement was made by the Society of Friends early in the eighteenth century, and the community has always been largely under their influence. The Friends' Meeting, which since its organization has been the mainspring of the life of this community, has had a recorded existence since 1753.

Many points in the history of this neighborhood are interesting and significant. Before the opening of the Revolutionary War, "The testimony against slavery" was taken up, and the beginning was made of committing this people to the policy of free labor owning the soil.

Shortly after 1830, prohibition was voted for the district surrounding the meetinghouse, and it was the influence of this settlement, working through the subsequent period of 50 years, which ultimately extended prohibition throughout the county.

Many institutions of great social and economic importance which still enjoy a flourishing existence had their beginnings in the second and third quarters of the nineteenth century. In 1844 a library company was organized, and a library was established at Sandy Spring. In 1844 the first farmers' club for men and in 1857 the first club for women were organized.

The organization of a lyceum stock company in 1858 gave rise to one of the most interesting customs of the neighborhood. As a means of encouraging attendance at the annual stockholders' meeting of this company, a neighborhood annalist was appointed who should keep a record of all community happenings and read it at the annual meeting. This practice is still continued. At the close of every 12-year period the annals are published in book form.

The Mutual Fire Insurance Co., the Savings Institution, the Grange, and Annual Convention of Farmers' Clubs, the Suffrage Association, and many other public enterprises were inaugurated in the third quarter of the century.

In many respects the criticisms which are often directed against agricultural communities are without force here. This is true, for example, as regards social organizations. Here, as elsewhere, societies have come and gone, but more often they have come than gone. There are at least 6 societies in existence now which are 40 years old or more; 10 societies now enjoying vigorous health may be enumerated. These include 10 agricultural societies of various sorts, a book club, a literary society, a benevolent aid society, a suffrage association, and various others.

The place occupied by the agricultural societies is very important, as they have been to a large extent responsible for the introduction of the improved methods of agriculture which prevail here and for raising farm life to its present high plane.

The social significance of all of these societies is great. Even if the community had no other opportunity for recreation than that furnished by its clubs, it would yet be better provided for than the average rural community.

The activities of the clubs do not, however, begin to exhaust the list of the amusements of this neighborhood. Every season has its lectures and its concerts, at least two or three of each, and a dozen or more home-talent plays and school entertainments of various sorts. There are at least 8 or 10 dances in the neighborhood each winter. In addition, there are all the various out-door activities of a well-organized community—tennis, baseball, basket ball, private picnics and outings, and similar functions.

IX. RELIGIOUS CONDITIONS AND ACTIVITIES.

Distribution.—There are in Montgomery County 135 churches in various conditions of health and activity. Of this number, 95 are white churches and 40 are colored. It is more convenient to consider these groups separately, treating the white churches first.

If the churches were evenly distributed, there would be one white church to every $5\frac{1}{2}$ square miles and to every 241 of the white population, a ratio which would provide more than adequate church facilities for the entire county. Their distribution has not this uniformity, but, as a matter of fact, there is no point in the county more than 5 miles distant from some church. The tendency in locating the churches has, however, been to anticipate the movement of the people out of the country into the town, by placing the churches at the centers of population. Nearly 85 per cent of the population live in the country, but the country claims only 55 per cent of the churches. Many of the town churches must rely for support upon the country and many people of the country must look to the towns for their church life.

Denominational classification and growth.—Eighty-six of the white churches are Protestant and 9 are Roman Catholic. The Protestant churches represent 15 different denominations. The bulk of their strength is divided between 5 denominations; 9 denominations have, each, 3 churches or less. The total membership of all churches is 9,701, of which 6,994 are Protestant and 2,707 Catholic.

Of the total white population, approximately 20,000 may be termed Protestant, or, at least, non-Catholic. Every Protestant church has, on an average, a possible membership of 234. Just how well this field has been cultivated may be inferred from the fact that the

average membership of all churches is only 81; hardly 35 per cent of the population are in the churches.

Of the 86 Protestant churches mentioned, 62 are growing, 3 are barely holding their own, 16 are losing ground more or less rapidly, 5 are practically on their deathbeds. Ten other churches not included in this total have passed away within recent years and must be numbered with the departed.

Working force.—There are 44 ministers working regularly in the county, of whom 39 are Protestant and 5 are Roman Catholic.

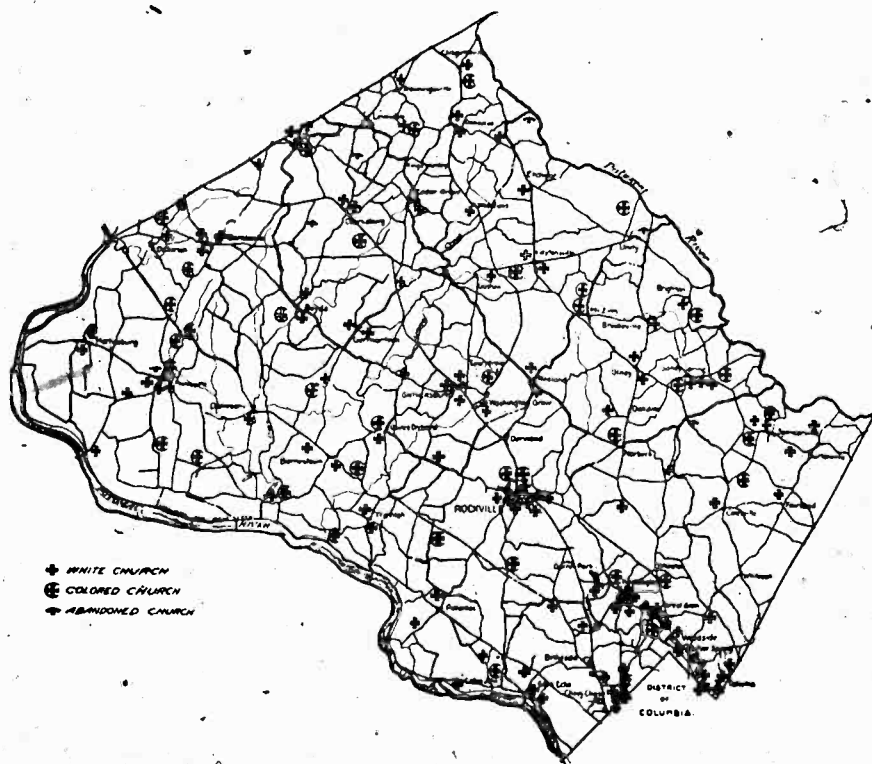
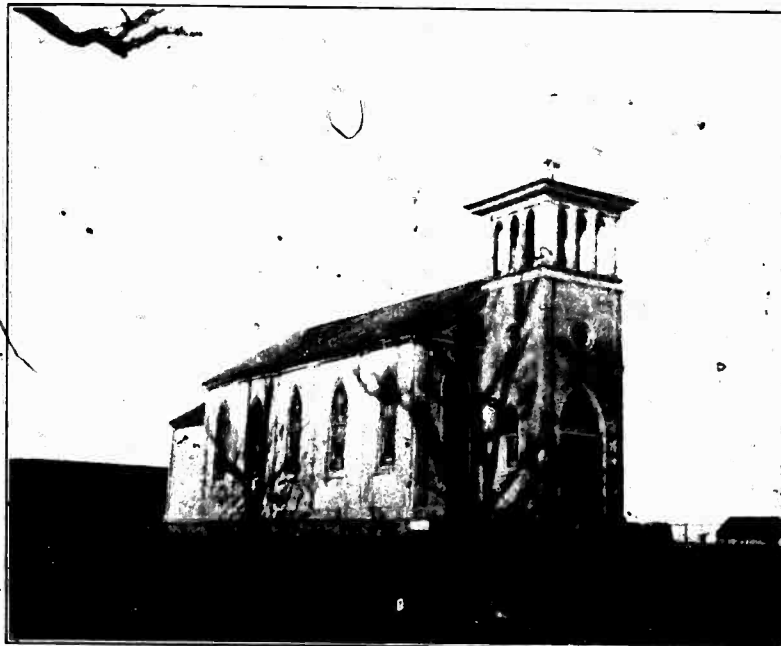


FIG. 1.—Location of churches.

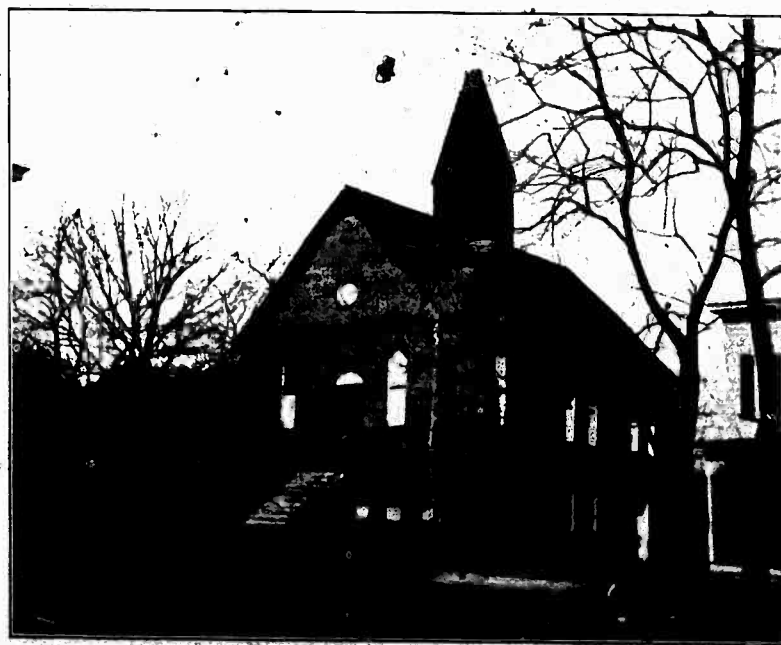
Three churches—Hicksite and Orthodox, Friends and Christian Science—do not have regularly employed ministers; 8 other churches are at present pastorless. The 39 Protestant ministers are in charge of 75 churches.

In the distribution of this force we see the remnants of that old system of farming out churches on circuits which has always constituted the great weakness of the country church.

Of the 39 Protestant ministers, 15 have 1 church each; 13 have 2 churches each; 3 have 3 churches each; 7 have 4 churches each; 1 has 5 churches.



4. EPISCOPAL CHURCH AT LAYTONVILLE.



5. COLORED CHURCH AT ROCKVILLE.

Of the churches over which these men have charge 49 are without a resident minister. Here is the source of one of the great problems of church efficiency. Fifty churches aim to hold a preaching service every Sunday, 41 have services every second Sunday, 4 have services every fourth Sunday. In these are included 11 churches which at the present time, for various reasons, are not holding regular services at all.

Forty-nine churches are without any form of organization for young people and 81 have no organization for their men. The church is here neglecting not only an effective method of religious work, but also an opportunity to teach men the needed lesson of cooperation in all their affairs by helping them to practice it in their church life.

The churches are making little effort to serve the community as a social center. Their activities are undertaken for the sake of the money to be raised by them and not because the church feels itself obligated to furnish recreation and social facilities for their own sakes. In general, the social life of the churches is at a distinctly low ebb.

The community's service to the church.—The aggregate annual budget for all the Protestant churches is \$88,519. The total amount expended on salaries per year is \$31,247, and the average per minister is \$842, the maximum being \$1,500 and the minimum \$250. Of every dollar, 35.3 cents is for the minister's salary; 24 cents is contributed toward various benevolences, practically all of it going to the established boards of the different denominations; 3.3 cents is the cost of maintaining Sunday schools, while the remaining 37.4 cents is required for the care of the church property and other running expenses.

The colored churches.—The colored churches are not so evenly distributed throughout the community as the white churches, for the reason that the colored population is not evenly distributed. There are 40 in all, one to every 231 of the colored population. Three denominations are at work in the county, one of these having more than half of the churches.

The average membership is 49.5 per church, and the total is 1,981, which is only 21.2 per cent of the population. That is to say, each church is reaching hardly more than one-fourth of its possible following. At almost every point the colored church is much more inefficient than the white church. Not only have they a smaller proportion of their population enrolled, but their efforts at progress are in comparison feeble. In six years their net gain has been only 10.8 per cent, as against 28.2 per cent for the white church. Only 15 of the 40 churches are growing at the present time, 10 are stationary, 10 are steadily losing ground, while 5 are unmistakably dying. These churches all cling to life with a remarkably tenacious grip. They rarely make an end of dying. Hence none of them have been abandoned. Yet very few of them have robust health.

There are 37 church buildings, valued at \$37,260, the average value being about \$1,000; 33 of these are one-room structures. Perhaps one-fourth of them are in reasonably good condition; the remainder are in various stages of dilapidation and decay.

There are 18 ministers in charge of 38 churches, 2 churches at the present time being pastorless.

Of the 18 colored ministers, 6 have 1 church each; 7 have 2 churches each; 2 have 3 churches each; 3 have 4 churches each.

On the face of it, this seems like a fair record, but it looks better than it is; for with two possible exceptions; the churches which have a minister on full time are in poorer condition than many of those on circuits.

Of the 40 churches, 12 have a service every Sunday; 24 have two services a month; 4 have one service a month. The total attendance in all churches holding service is, on an average Sunday, a little more than 1,000.

Thirty-eight of the churches have Sunday school, of which 28 are in session throughout the year. Their total membership is 1,402, and the total average attendance is 991. This is an average attendance and membership per school of 26 and 37, respectively. There are in all 164 teachers, 1 to every 6 pupils in regular attendance.

There are 15 young people's organizations, with a membership of 418; 7 women's societies, with a membership of 370; 3 organizations for men, with a membership of 33, and 2 other organizations, with a membership of 75. This makes a total of 37 organizations, with an aggregate membership of 896. Twenty-five churches have no organizations at all excepting the Sunday school.

The colored church appears to occupy a larger place socially in the lives of its members than the white church does. A great majority of the churches have some regular social features. The relation between the church, the school, and the lodge usually is a close one. Most of the entertainments have the same financial consideration as in the white churches, but their social significance is great.

The annual budget of the churches totals \$10,867, an average of about \$272 per church. Of this amount, \$6,560 is for salaries. The average salary is only \$364.45; the maximum is \$748, the minimum \$50.

Chapter II.

EDUCATIONAL CONDITIONS.

I. GENERAL FEATURES.

Any discussion of the educational conditions of the county must center about the public-school system. It is here that the most accurate register is found of the general characteristics of the people as a whole. The public schools are not only by far the most important single factor in the educational process for the average community; they also sympathetically register the achievements of a people. An intelligent and progressive people build for themselves strong, adequate schools. An ignorant and nonprogressive people build their schools on the normal level of their lives. This is because the school is a *social* institution. Prosperous social institutions must always presuppose a prosperous population. As society is now organized, the school offers the community probably its one best opportunity to act as a unit. This opportunity it does not always grasp. Nevertheless, the school is apt to be a fairly accurate index both of the spirit of a community and of the ideals to which it responds.

Organization and supervision.—The management and supervision of the public schools of Montgomery County are intrusted to a continuing board composed of 6 commissioners, each appointed by the governor of the State for a term of 6 years, and to a county superintendent appointed by the board. Each school has 3 local trustees, also appointed by the county board, who cooperate with it and under its direction has the immediate oversight of the work of the school. The county board, however, has complete and final control over the schools, and all matters of policy and administration rest with it and with the superintendent.

Separate schools are provided for the white children and for the colored children, but both are under the same management and supervision and are parts of one system.

Under this organization the management of each individual school is very direct and complete. The unit is the county. The superintendent as an agent of the board is required to visit each school in the county and personally see to its needs. One advantage of the system lies in the uniformity of its results. In no case can one school or the schools of one locality fall much below the general level for the county. The same standards of teaching efficiency are maintained throughout the county. The course of study and the schedule of work are planned for all schools and given to the various teachers by the superintendent. All examination questions are also sent

from his office. The instructional work of the schools is supervised as far as it is possible for one man to do so by the county superintendent.¹ However, the county is so large and its schools so numerous that the proper supervision involves more work than one man can accomplish well.

In organization for the management of the schools, the system in Montgomery County is the general type of organization for the entire State of Maryland. The Montgomery County board is composed of highly efficient men, genuinely concerned for the welfare of the schools and discharging their duties faithfully and with marked ability.

In the detailed discussion which follows it is convenient to discuss the schools for white children and those for the colored children in separate sections. The former will be considered first.

II. SCHOOLS FOR WHITE CHILDREN.

Number, distribution, and kind of schools.—The total population of the county between the ages of 5 and 20 years is 10,800. Of this number, approximately 7,710 are white and 3,090 colored. There are in all 106 schoolhouses in the county, 76 of which are for white pupils.² The county owns 103 of the buildings and rents 3. There is one school for every 101 of the white population of school age and one for every 103 of the negro population of school age. The 76 schools for white children include 7 high schools and 69 elementary schools. Of the elementary schools, 52 are one-room one-teacher schools, with seven or eight grades. The other 17 elementary schools have two or more rooms, and many carry the work as far as the tenth grade.

The following table gives the distribution of the schools by election districts:

Distribution of schools.

Election districts.	One-room elementary schools.	Other elementary schools.	High schools.	Total.
1. Laytonsville.....	6	2	0	8
2. Clarksburg.....	7	2	0	9
3. Poolesville.....	4	0	1	5
4. Rockville.....	5	1	1	7
5. Colesville.....	4	1	0	5
6. Darnestown.....	4	1	1	6
7. Bethesda.....	0	2	0	2
8. Olney.....	3	0	2	5
9. Gaithersburg.....	2	2	1	5
10. Potomac.....	4	1	0	5
11. Barnesville.....	4	1	0	5
12. Damascus.....	4	2	1	7
13. Wheaton.....	5	2	0	7
Total.....	52	17	7	76

¹ An office clerk is employed to assist the superintendent and the county board in clerical work.

² Several additional schools were opened in September, 1912.

Seventeen of the schools are located in towns; 59 are located in the open country or in very small villages. The geographical distribution is fairly even, and there is no section of the county without a school reasonably accessible; 41 of the schools are so situated as to be adjacent to stone roads, railroads, or trolley lines.

Only one school in the county is a consolidated school with transportation of pupils at public expense.¹ This is the Poolesville School, which maintains both an elementary department and a high-

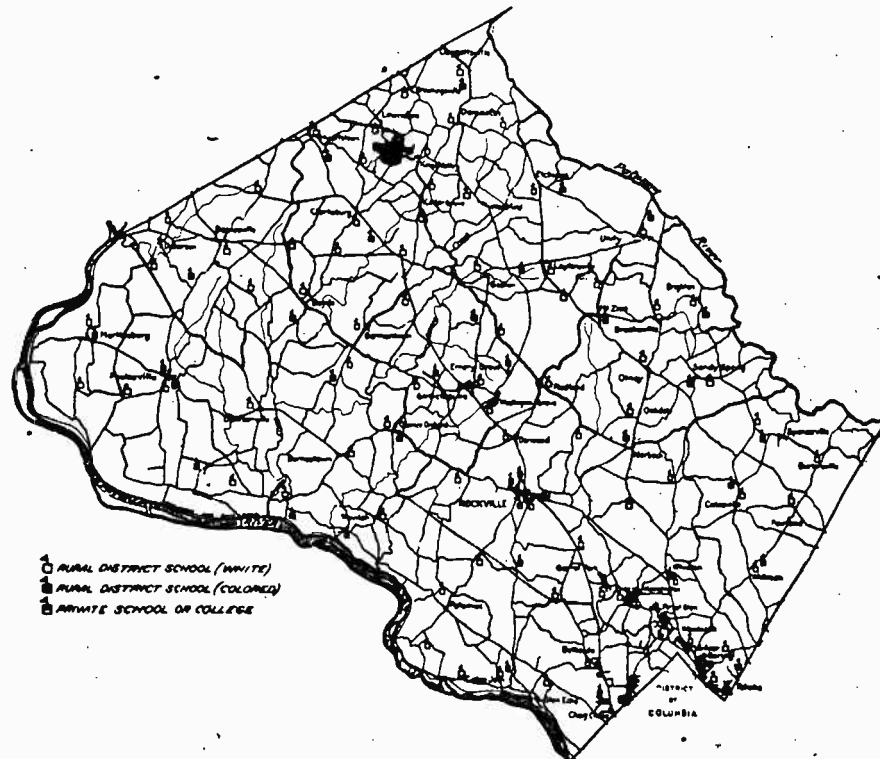


FIG. 2.—Location of schools.

school department. A glance at the school map above shows that this does not exhaust the possibilities for consolidation in the county. It will be noted that there are many groups of three or four small schools so situated that their pupils live within easy haul of some convenient center. Indeed it would not be at all difficult to plot out the county into districts, say from 15 to 20 in number, within which all the schools might be centralized. In several sections agitation has already begun for some such readjustment.

¹ Two additional consolidated schools have been established since the survey was made.

The material equipment.—The 76 schools occupy 77 buildings, 70 of which are frame structures, 5 are brick, and 2 are stone. The total number of rooms is 151, of which 140 were used for school purposes in 1912. The school law requires the maintenance of a certain average attendance before two teachers can be assigned to one school, so that a number of two-room buildings were in effect only one-room schools.

In the following the total number of rooms, the number used for school purposes last year, and the number of one-teacher schools is shown by election districts:

Schoolrooms by election districts.

Election districts.	Number of school rooms.	Used for school purposes.	One-room one-teacher schools.
1. Laytonsville.....	12	10	6
2. Clarksburg.....	11	11	7
3. Poolersville.....	8	7	4
4. Rockville.....	20	19	5
5. Coleville.....	8	6	4
6. Darnestown.....	10	10	4
7. Bethesda.....	5	5	0
8. Olney.....	20	20	3
9. Gaithersburg.....	16	14	2
10. Potomac.....	6	6	4
11. Barnesville.....	7	6	4
12. Damascus.....	12	11	4
13. Wheaton.....	16	15	5
Total.....	151	140	52

The one-room school is the greatest problem in the development of rural education. The most frequent criticism brought against the rural schools is that their courses of study and their teaching methods have been borrowed from the city schools, and that nothing has been offered the country pupils distinctly adapted to their actual sphere in life. In another connection is discussed the movement for broadening the curriculum of the rural schools by the introduction of studies intended directly to equip the pupils for farm life. The later discussion of this subject may be anticipated by calling attention at this point to the relation which the proportion of one-room schools has to the problem. It must be remembered that the demand for broadening the curriculum is accompanied by an equally insistent demand for more efficient teaching. In the school in which one teacher has 30 or more pupils in 8 different grades, with the average length of the recitation period from 10 to 15 minutes, it is very difficult to increase the efficiency of the teaching and to introduce new subjects into the curriculum.

The chief defects of the school buildings are defects of architecture, rather than of equipment or condition. In general, it must be said that their equipment for school purposes is above the average for similar communities. All of the buildings are in a fair state of repair, and most of them are in good condition. Nearly half of them have

been built within the past 10 years. They are of suitable size, containing on an average about 650 square feet of floor space, with a ceiling 10 to 12 feet high.

Their weakness from an architectural point of view arises from the fact that they appear to have been built with one idea in mind, that of providing seating accommodations for a given number of pupils. Little attention was paid to the questions of proper lighting, heating, and ventilation, three considerations of prime importance.

In regard to the lighting in the 102 rooms in the buildings which contain the one, two, three, and four room schools, the arrangement

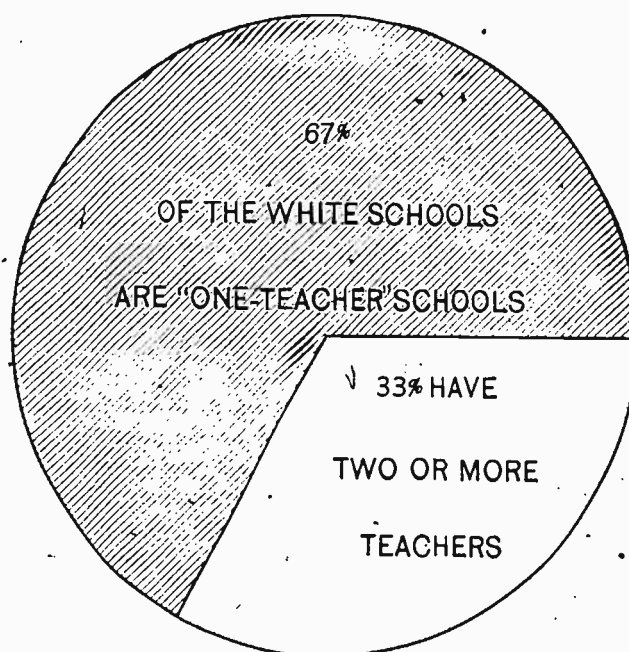


FIG. 3.—Proportion of one-teacher schools.

of the windows is as follows: 64 rooms have windows on the right and the left sides; 10 rooms have windows on the right and left sides and also in the rear; 16 rooms have windows at the left and rear; 10 rooms have windows at the right and rear; 2 one-room buildings have windows on all four sides.

It has been very generally agreed by authorities on the subject of school architecture that no schoolroom should be lighted from more than two sides and that, preferably, the light should come from one side only. In all cases, the strongest light should fall over the left shoulder of the pupil. If windows are provided on two sides of the building, they should be at the left of the pupils and at their rear. Windows at both the left and right cause a cross light which is very

confusing and is harmful to the eyes of the children. Windows at the front of the room should not be tolerated under any conditions.

There is no room in all these smaller schools which is lighted from one side only, and only 16 in which the windows are placed at the left and rear of the pupils. In 86 out of 102 rooms the method of lighting is distinctly faulty.

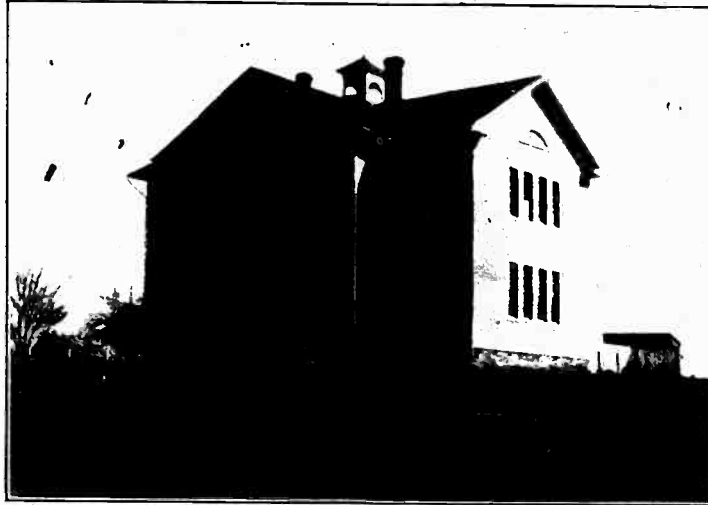
The amount of window surface relative to the amount of floor space in the room is a matter of importance. Authorities agree that the total window space should equal at least one-fifth of the total floor space. Figures on this point are available for 90 rooms. In 41 of these the total amount of window surface was adequate, that is, it was equal to or in excess of one-fifth of the floor space. In 49 rooms it was inadequate, the amount of window space varying from one-sixth to one-tenth of the floor space.

The color of the walls of a schoolroom has its effect on the lighting and on the pupils' eyes. Data were obtained on this point from 77 rooms. In 36 of these the walls are now, or were at one time, white. In 19 they are of a tan or buff color, in 9 cream, in 6 green, and in 5 light blue. White has several disadvantages, among which are the facts that it is easily soiled and when finished with a smooth surface has a glare that is relatively hard on the eyes. The most satisfactory color is a light-buff tint or a light gray. The space between the window sills and floor might be light brown.

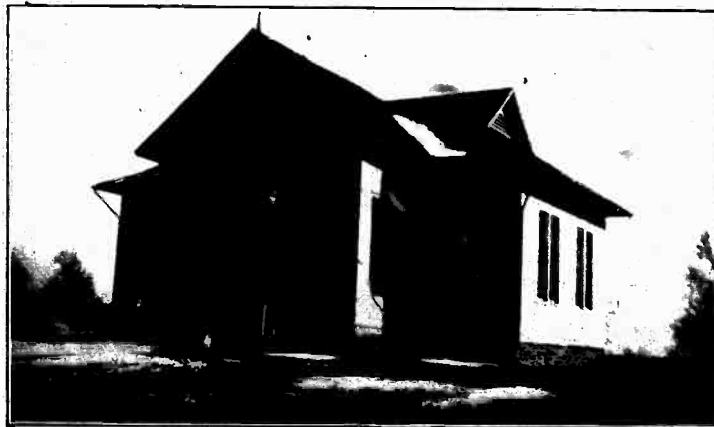
The heating arrangements in the 77 separate buildings are as follows: Seven of the buildings are heated by furnaces; 10 are heated by jacketed stoves; 60 are heated by unjacketed stoves.

With the jacketed stove it is comparatively easy to heat a schoolroom evenly and to a proper temperature and to assure proper ventilation. With an unjacketed stove it is very difficult to do either. The question of ventilation is a serious one in the one-room schools. Pupils can not do their best work without a proper supply of fresh air. The jacketed stove furnishes this fresh air at an even temperature to all parts of the room, and it also removes the foul air from the room. In schools with the unjacketed stove the usual method of ventilation is by use of the windows. In cold weather particularly it is difficult to heat the room satisfactorily even with the windows closed. With them open for ventilation it is practically impossible to secure a satisfactory temperature in all parts of the room.

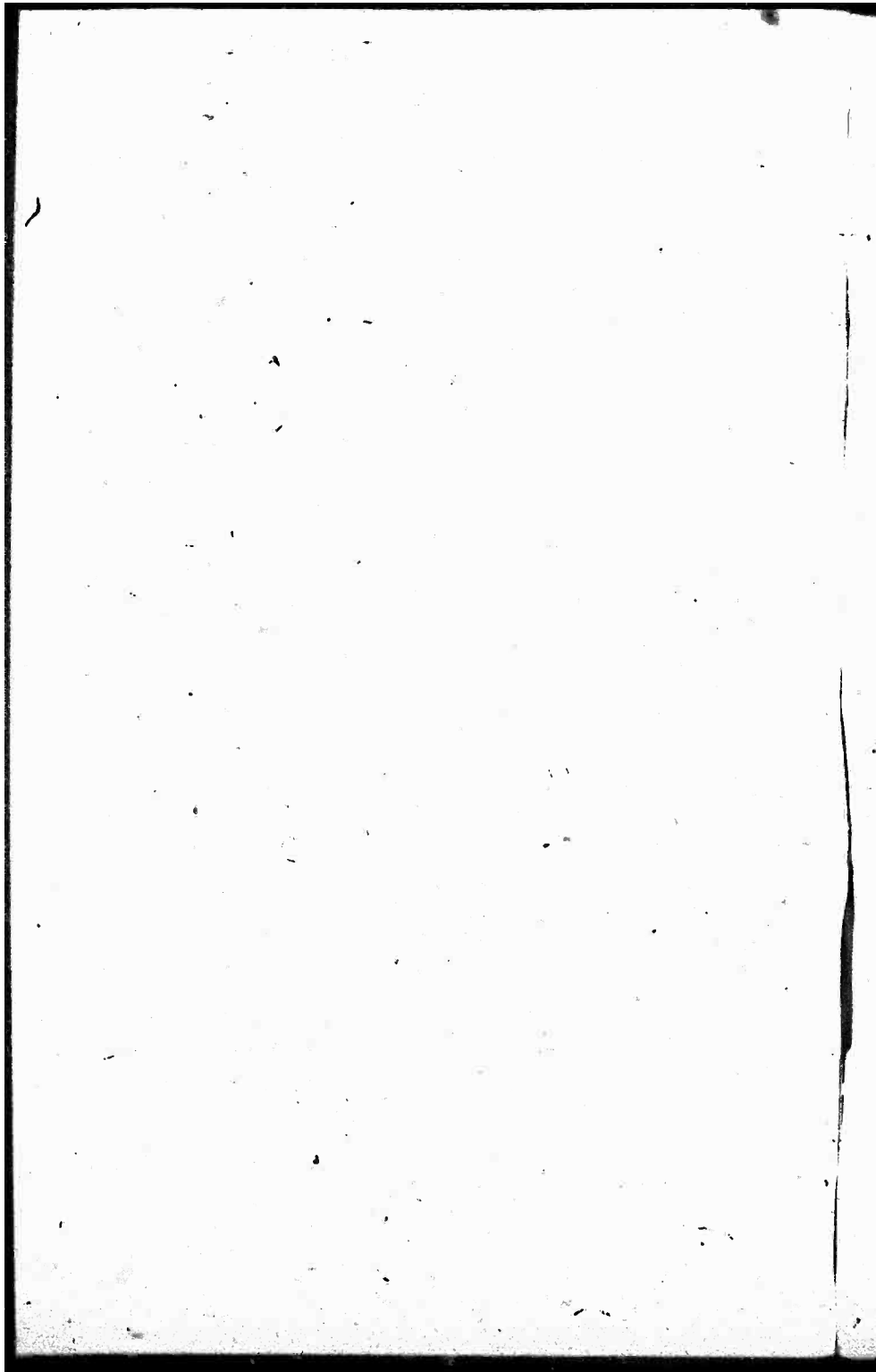
In regard to the blackboard space provided: In 90 rooms from which data were obtained this varied from 25 to 245 square feet per room. The average for the 90 rooms was 86 square feet, an amount sufficient to accommodate amply 9 pupils at the board at one time. In 31 rooms the amount provided was insufficient. The quality of the board used was in most instances satisfactory. In most of the rooms the bottom of the board was 36 inches or more from the floor.



A. LAYTONVILLE SCHOOL.



B. CLARKSBURG SCHOOL.



This is a convenient height for pupils above the third grade, but it is too high for those in the lower grades. In 46 one-room schools with eight grades each only 4 had the blackboard 26 inches or less from the floor, the proper height for the youngest children. In 17 other rooms, used for first and second grades only, only 5 had the blackboard placed at this height.

In all but 13 schools the seating facilities are quite ample for present needs. In the Poolesville, Rockville, and Damascus districts there are two schools each without ample seating facilities. In all of the other districts, except Wheaton, Bethesda, and Laytonsville, there is one school each without sufficient seats for all the pupils. In 28 schools there are musical instruments, either piano or organ.

Twenty-two per cent of all rooms are fitted with single desks; practically all of these rooms are in the high schools and the larger elementary schools; 78 per cent have the old double desks. Only a very few rooms have adjustable desks. In the one-room schools particularly desks of proper size for the pupils were not found, and many children were using desks either too large or too small for them.

In almost all of the schools throughout the county more or less attention has been paid to improving the interior by the use of pictures of noted men and women and of buildings or of scenery. These decorations represent all degrees of artistic appreciation and taste, but for the most part they are good. The Rockville High School deserves especial mention. It has recently purchased some excellent plaques and friezes from funds amounting to several hundred dollars raised by the pupils themselves.

Fifty schools have pupils' cloakrooms; 26 have not; in only 6 schools are teachers' rooms provided. All but 11 schools have good water supply; 56 have wells and 9 have springs on the school property or within a convenient distance. Sanitary conditions are in the main good. All but 4 schools have outside toilets, but only 12 of them are in any respect insanitary.

Certain special features in equipment should be mentioned. Assembly halls are provided in 5 schools. Well-equipped domestic-science and manual-training rooms are provided wherever these subjects are taught. The domestic-science room at the Rockville High School is particularly complete. Here each pupil is furnished with a small alcohol stove for the cooking experiments. Brookeville High School has a special domestic-science building. The latter high school is interesting in another respect also, in that it has rooming and boarding accommodations for nearly 20 pupils, who drive in from the surrounding country on Monday morning and return to their homes on Friday night.

Both as regards buildings and equipment, the policy of the present school administration has been one of expansion; 26 new school

buildings have been erected within the past six years. Only 6 of these have been one-room buildings. In many of these provision has been made for a considerable growth in the future. The Woodside school, for example, is a two-story brick building with 7 recitation rooms and an assembly hall. Only 4 recitation rooms are at present required. The other 3 will be finished and opened as soon as there is need for them.

Grounds.—The total acreage of the school grounds is 98½. This includes a 32-acre farm adjacent to the Brookeville High School, which is used in connection with the courses in elementary agriculture.

Thirteen of the school lots are fenced; 36 are fairly level; 41 are either rolling or hilly; 11 have good walks; 63 have trees; 13 have flower beds; and 1 has a vegetable garden.

The grounds of the larger schools are frequently well kept. The Brookeville High School is the best illustration of this. A fine lawn, beautiful trees, and a good athletic field make the appearance of this school very attractive. At the newer schools the grounds have not yet received much attention, and little effort has been made to beautify the surroundings of the one-room schools.

In planning buildings and grounds, except as noted below, relatively little attention has been paid to the needs of the pupils for recreation. In another connection the lack of recreation facilities in the county is noted, and attention is called to the fact that there is apparently no institution which at present furnishes such facilities for their own sakes. It is very much to be desired that the school should enter this field and provide recreation in a systematic and thorough fashion.

At several of the larger schools, notably the Sandy Spring, Brookeville, Gaithersburg, and Rockville High Schools, provision has been made for recreation. Tennis courts, basket-ball grounds, and baseball fields are available. Rockville High School has equipment for formal indoor gymnastics. Dumbbells and Indian clubs are provided. This school also has guns and uniforms for a boys' battalion. In only 11 schools of the entire 76 is there any sort of play apparatus. At nearly one-half of the schools there is not even a suitable playground. The school lots are either too small or undrained, and therefore apt to be muddy in winter and spring, or they are so rough and broken that the ordinary games can not easily be played upon them. In only a very few instances was it found that the teachers superintend the play hour and teach the pupils games. It has been found that with a little oversight by the teacher the pupils learn through play many valuable lessons.

Forty-seven schools do not have a United States flag.

The following table gives the value of the school buildings and grounds by election districts, the Darnestown and Brookeville High

Schools not being included in the totals for their respective districts or for the county, since they are not the property of the county:

Election districts:	Value of school buildings.
1. Laytonsville.....	\$6,850
2. Clarksburg.....	6,750
3. Poolesville.....	3,700
4. Rockville.....	35,900
5. Colesville.....	9,300
6. Darnestown.....	2,250
7. Bethesda.....	10,500
8. Olney.....	17,700
9. Gaithersburg.....	24,100
10. Potomac.....	2,650
11. Barnesville.....	3,600
12. Damascus.....	7,700
13. Wheaton.....	24,050
Total value.....	155,050

Teaching force.—The total teaching force in the white schools when the survey was made was 128, of whom 27 were males and 101 females. An attempt was made to obtain information as to the general education and professional training of these teachers. The data obtained were incomplete, but accurate data were obtained of the teaching force for the term beginning in September, 1912. They are included in the table below. It will be noted that the white teaching force has increased from 128 to 145. The general education and professional training of the white teaching force is as follows:

Teachers who have completed—	
Elementary schools only.....	9
One year of high school.....	2
Two years of high school.....	7
Three years of high school.....	9
Four years of high school.....	48
One year of normal school.....	7
Two years of normal school.....	13
Three years of normal school.....	14
Four years of normal school.....	7
One year at college.....	6
Two years at college.....	5
Three years at college.....	4
Four years at college.....	14
	145

Twenty-seven teachers attended summer school for 1 year; 9 attended for 2 years; 7 for 3 years; and 3 for 4 years.

One of the chief weaknesses of rural schools in the United States as a whole is due to the constant shifting of teachers from one school to another. It is probable that, for the United States as a whole, more than 50 per cent of the rural schools are taught by a different

HIGH SCHOOLS-4 GRADES

ELEMENTARY SCHOOLS-7 GRADES

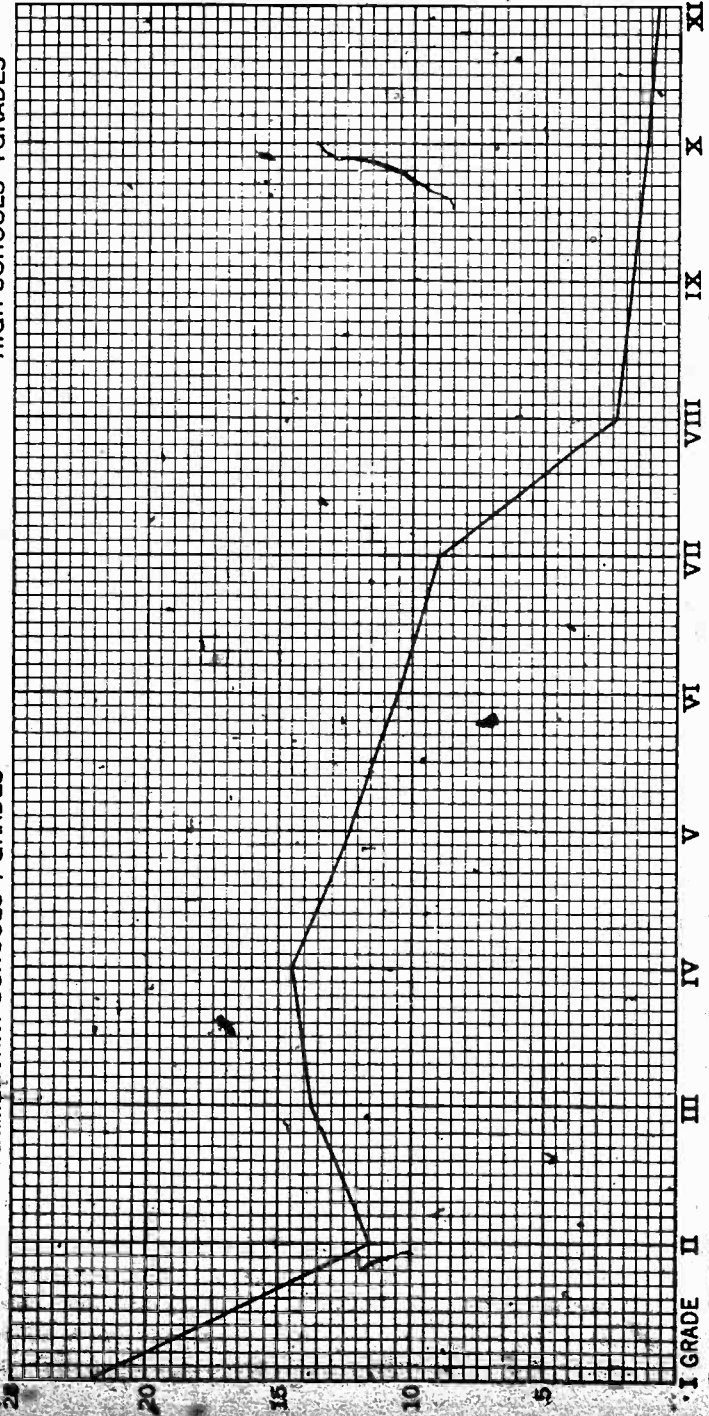


Fig. 4.—Enrollment by grades in the schools for white children. (The figures at the left indicate the percentage of the total enrollment; the figures at the bottom indicate the percentage of pupils in country schools included in the eighth grade, as such pupils have completed the full work of the seventh grade. Grades 1 to 7 are elementary; 8 to 11 are high school.)

teacher each year. In this respect Montgomery County is fortunate. All the teachers in the spring of 1912 reported the length of time in the position they were then holding. The average length of time for the entire county was four school years. The average is very high. It is partly due to a few teachers whose length of service has been exceptionally long. Omitting these, the average tenure was approximately three years. The average number of positions held by all the teachers during the past five years was 1.6, which is low when compared to averages for the United States. The average number of years of teaching experience was 8.1.

An inquiry was made to determine whether the teachers looked upon their teaching occupation as a life work or not. Fifty-five reported that it was their intention to continue teaching indefinitely; 50 had definitely decided to give up teaching in the near future; and 20, mostly of the younger group of women teachers, had not as yet made up their minds on this point.

Nine special teachers are employed in the county—four for domestic science, two for commercial branches, and one each for manual training, agriculture, and music. The four domestic science teachers are in the high schools at Rockville, Gaithersburg, Brookeville, and Sandy Spring. The commercial teachers are in the Rockville and Gaithersburg High Schools. The Rockville and Gaithersburg elementary and high schools and the Kensington elementary school share the time of the manual training teacher. Sandy Spring and Brookeville High Schools share between them a male teacher of agriculture. Sandy Spring elementary and high schools have a teacher of music.

Pupils.—The total enrollment of the schools is 3,927—1,999 boys and 1,928 girls. The first table which follows gives the total enrollment by districts. The second gives the enrollment by grades:

Enrollment in election districts.

Election districts.	Male.	Female.	Total.
1. Laytonsville.....	118	117	235
2. Clarksburg.....	228	170	398
3. Poolsville.....	105	106	211
4. Rockville.....	280	263	543
5. Coleridge.....	134	99	233
6. Darnestown.....	133	114	247
7. Bethesda.....	82	74	156
8. Olney.....	151	164	315
9. Gaithersburg.....	152	188	340
10. Potomac.....	96	87	183
11. Barnesville.....	99	126	225
12. Damascus.....	166	157	323
13. Wheaton.....	255	263	518
Total.....	1,999	1,928	3,927

Enrollment by grades.

Election districts.	First. ¹	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth. ²	High school.
1. Laytonsville.....	52	29	31	33	36	29	21	6	0
2. Clarksburg.....	102	35	65	69	53	30	12	0	0
3. Poolesville.....	43	27	22	38	21	23	17	0	22
4. Rockville.....	102	64	65	54	70	47	51	0	83
5. Colesville.....	46	28	24	39	36	26	16	1	0
6. Darnestown.....	55	31	31	39	27	26	23	2	12
7. Bethesda.....	39	15	31	20	16	15	24	0	0
8. Olney.....	31	26	29	25	24	39	31	0	101
9. Gaithersburg.....	75	32	40	45	52	25	31	2	38
10. Potomac.....	54	14	20	26	26	21	22	3	0
11. Barnesville.....	62	14	30	31	11	16	16	3	0
12. Damascus.....	53	46	37	51	42	39	45	7	13
13. Wheaton.....	115	68	79	71	47	53	47	16	0
Total.....	829	429	514	541	461	389	356	40	209

¹ Under "first grade" are included the beginner's class as well as the first grade proper. Two years is required in many cases for admission to second grade work.

² Pupils pass directly from the seventh grade to the high school. Those under this heading are taking advanced work in elementary schools not located within easy reaching distance of any high school.

The total white population of school age in the county is 7,710. The enrollment of the schools is 50.9 per cent of this total. For the entire continental United States, according to the United States Bureau of Education, the proportion of the population of school age enrolled in the public schools is 64.2 per cent. Montgomery County, then, is nearly 14 per cent below the average for the country as a whole, even allowing for the number (probably 60 to 70) who attend private schools and colleges. The State legislature has just passed a compulsory attendance law (1912), requiring the attendance of children under 14. This law was adopted by the Montgomery County board, and goes into effect in the fall of 1913. It should do much toward remedying this condition.¹

The total average daily attendance for all schools was 2,629, or 67.3 per cent of the enrollment, and 34.1 per cent of the school population 5 to 20 years of age, inclusive. This means that 65.9 per cent of the total number of white children of school age were not in regular attendance upon the public schools, a proportion large enough to cause serious concern. The schools might reasonably be expected to show a larger proportion in regular attendance. There were some interesting differences between the different districts in this respect.

¹ The low enrollment was due in part to the large number of children in Bethesda and Wheaton districts attending school in the District of Columbia. Regulations regarding the attendance of nonresident children in the schools of the District of Columbia, effective in September, 1912, increased the enrollment in the Montgomery County schools by approximately 600.

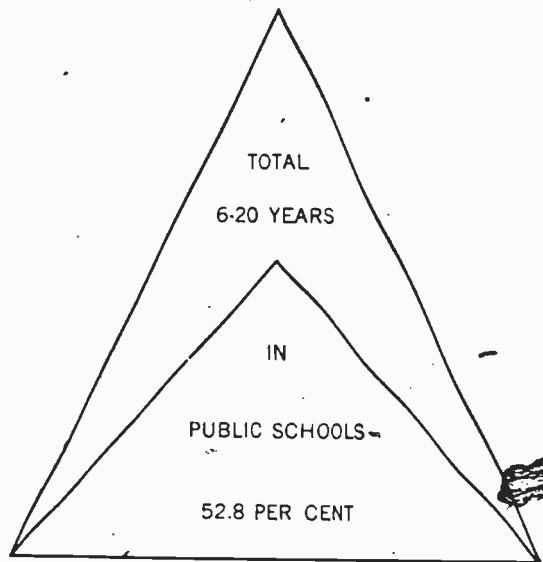


FIG. 5.—Enrollment.

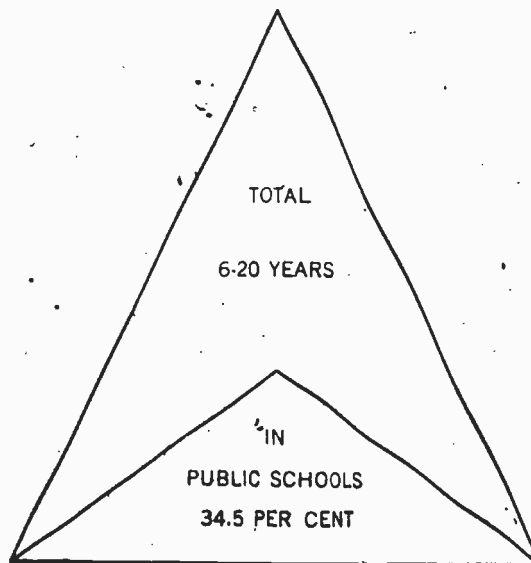


FIG. 6.—Average attendance.

36 EDUCATIONAL SURVEY OF MONTGOMERY COUNTY, MD.

Table showing the total average attendance, average attendance per school, and the per cent of attendance to enrollment by election districts.

Election districts.	Average number attending daily.	Average attendance per school.	Number attending daily for every 100 enrolled.
1. Laytonsville.....	161	20.1	68.6
2. Clarksburg.....	243	27.0	61.0
3. Poolesville.....	146	29.2	68.8
4. Rockville.....	398	56.8	73.3
5. Colesville.....	125	25.0	53.8
6. Darnestown.....	156	26.0	63.4
7. Bethesda.....	122	61.0	78.2
8. Olney.....	246	49.2	78.1
9. Gaithersburg.....	239	47.8	70.2
10. Potomac.....	97	19.4	53.0
11. Barnesville.....	118	23.6	52.0
12. Damascus.....	210	30.0	64.0
13. Wheaton.....	378	54.0	72.9
Total.....	2,639	347.0	65.9

The percentage of attendance to enrollment is relatively high (68 per cent or more) in districts 1, 3, 4, 7, 8, 9, and 13. The reasons for this are not far to seek. Poolesville had at the time of the survey the only consolidated school with public transportation of pupils in the county. The other six districts have the best transportation facilities, both as regards roads and accessibility of railways and trolleys. The proportion in regular attendance is relatively low (64 per cent or less) in districts 2, 5, 6, 10, 11, and 12, where the transportation facilities are not good. There is nothing finally conclusive about this, and certain local variations are not thereby to be accounted for. This would not explain, for example, why the attendance is better in the Damascus district than in the Colesville district. It does, however, show a general tendency and indicates that the school as well as the farm needs good roads.

Student organizations.—There were last year in existence only 13 student organizations of any sort in the schools in the county. Of this number, 8 were debating and literary societies, 2 were athletic associations, and 1 was a boys' brigade. It does not appear that full advantage is taken of a fine opportunity. The total membership of these 13 societies was about 250, a very small proportion of the pupils who might profitably have been organized in a similar way.

In 1911 a step was taken toward a larger service to the boys in the schools when a corn-growing contest was initiated by the president of the board of school commissioners. Not much interest was manifested in this the first year, although the contest was successful in a small way. This year the Agricultural High School at Sandy Spring has taken charge of the matter and will make this contest a permanent feature of the year's program in connection with an annual "corn congress," to be held in the fall. Prizes ranging from \$5 to \$50 have been offered and the contest is open to all boys from 10 to 15 years of age. The conditions of the contest are:

- (1) All of the work must be done by the boy except the plowing.
 (2) The corn grown on the acre shall be the property of the boy, whether he wins a prize or not.
 (3) The following basis shall be used in awarding the prizes:

	Per cent.
Greatest yield per acre.....	40
Best showing of profit on investment.....	40
Best written account showing history of crop.....	20
Total.....	100

- (4) Boys must keep a record of the time spent in doing the work and of the expenditure for seed, fertilizer, etc.
 (5) The amount of land used shall be 1 acre for each boy.

The contest in 1912 was well advertised, and great interest was manifested in it. It is hoped that results of considerable importance will follow.

Studies.—The teacher in a one-room school has many things to do and very limited time to do them in. This is one of the prime reasons why the criticism holds true here, as in every place where the one-room school exists, that the curriculum of the country school contains little or nothing that distinctly prepares for country life. In spite of the fact that conditions are far better here than in many other rural communities, the fact is that each teacher in the county must conduct on the average 23 recitations per day with the average time allotted each recitation only 15 minutes. In the one-room school the number of recitations is even greater, being approximately 30 in each school. The time for each recitation is of course shorter, the average being 11 minutes. A program so full leaves opportunity for very little beyond the limits of the prescribed course of study, which contains only those subjects familiarly referred to as the "common branches." This course of study and the plan of work based upon it are prescribed by the county school commissioners, and are patterned largely after the town and city school course. It emphasizes, particularly in the higher grades, the cultural rather than the industrial. It needs to be revised for the country school. The curriculum does not take into account the special conditions under which the country pupil is to live and work. There is need of a fundamental readjustment which will in part take the form of the introduction of certain courses having direct bearing upon the country pupil's needs and in part take the form of a shift in emphasis throughout the entire course of study. It is not to be supposed that cultural studies should be dropped from the curriculum of the rural school. In certain instances they might well receive increased attention. The pupils might devote more time to music and drawing than they are now doing.

A beginning has already been made in the larger schools of the county toward this readjustment. Special courses have been introduced and in some instances special teachers have been procured to

train the pupils along certain practical lines. An inquiry was made as to the extent to which certain subjects, deemed of special importance for rural children, were taught. These subjects were nature study, elementary agriculture, domestic science, manual training, music, and drawing. The following table indicates the number of schools teaching each and the extent of the work. By "little" is meant that approximately from 15 to 30 minutes per week is given to talks, observation, or elementary exercises; by "medium" is meant that some systematic effort is made to teach the subject at prescribed periods throughout one or two years, enough time being given to it to assure some thoroughness; by "much" is meant that there is a full four years' course offered, with special teachers. The figures refer to the number of schools in which these studies are taught.

Number of schools teaching certain subjects.

Subjects.	Not at all.	Little.	Medium.	Much.
Nature study.....	43	20	4	4
Elementary agriculture.....	52	13	4	2
Domestic science.....	63	4	0	4
Manual training.....	67	1	3	1
Music.....	48	19	4	1
Drawing.....	46	22	4	0

It will be noticed that the greater proportion of the schools give no time at all to these studies, while only a small number attempt to teach them thoroughly. Four high schools—Rockville, Gaithersburg, Brookeville, and Sandy Spring—each have a special teacher of domestic science; three schools—Rockville, Gaithersburg, and Kensington—share the time of one man as an instructor in manual training. Sandy Spring and Brookeville High Schools share between them the entire time of one man for teaching elementary agriculture. Rockville and Gaithersburg each have a commercial teacher. Sandy Spring has a special teacher giving her entire time to music. The Sandy Spring and Brookeville High Schools are probably the most interesting schools in the county in these respects. Each is a genuine rural high school, making definite and successful efforts to adapt their pupils to the conditions of country life.

Fifty-one schools have libraries varying in size from 1 volume to 2,000 volumes per school. The total number of volumes in all the schools is over 7,000, the average for each school reporting being about 138. The schools reporting libraries may be grouped as follows:

Schools having libraries with from—	Schools.
1 to 25 volumes.....	4
25 to 50 volumes.....	11
50 to 75 volumes.....	9
75 to 100 volumes.....	5
100 to 200 volumes.....	17
200 to 500 volumes.....	4
Over 500 volumes.....	1

The books are mostly general literature, histories, essays, poetry, and fiction. For the most part the selection is from a list approved by the State Board of education. About 50 per cent of the pupils above the fourth grade use the books more or less regularly.

Forty-six schools reported that they gave in 1911 a total of 151 public entertainments. These were variously literary or musical programs, home-talent plays, lectures, or celebrations arranged for various holidays. They were largely attended by the school patrons in most instances.

Nine schools are so located that they are affected by private or parochial schools. Several schools near the line of the District of Columbia lose a number of their pupils to the Washington City schools. The schools in Takoma Park are slightly affected by the Seventh Day Adventist Seminary. The Rockville High School is affected by the Rockville Academy.

High schools.—There are in the county seven public high schools, located at Brookeville, Darnestown, Gaithersburg, Germantown, Poolesville, Rockville, and Sandy Spring. There is one in each of five election districts, Poolesville, Rockville, Colesville, Gaithersburg, Darnestown, and Damascus, and two in Olney. The school at Rockville is the county high school. It is the only high school in the county listed by the State department of education in "Public high schools of the first group." The Brookeville, Sandy Spring, and Gaithersburg High Schools are listed by the State department as schools of the "second group."

To be classed in the "first group" a high school must have 80 or more pupils, four or more academic teachers, a four-year course of at least 36 weeks a year, a course of study prescribed by the State department, and must conform to several other regulations of the State department. A "second group" school must have 35 or more pupils, two or more academic teachers, a three-year course of at least 36 weeks a year, and must conform to the regulations of the department. The State contributed to each of the schools in the second group \$1,400 for the year ended in June, 1912, and to the Rockville High School \$2,300.

Of the three graduates of Sandy Spring School in June, 1912, one entered the Pennsylvania State College and one the University of Virginia. Of the eight graduates of Brookeville, two entered the State Normal School at Baltimore, two the Western Maryland College, and one St. Johns College at Annapolis. None of the four graduates at Gaithersburg is in a higher institution, but two are teaching in the county.

The following table gives data regarding the seven schools:

High schools in Montgomery County.

Districts.	Years in course.	Days in session.	Teachers.	Students, by years.				Graduates, June, 1912.	Books in library.	Value of grounds and buildings.	Apparatus, equipment, and furniture.
				First.	Second.	Third.	Fourth.				
Brookeville.....	4	180	6	21	19	13	8	8	200	\$15,000	\$600
Darnestown.....	4	190	2	6	3	0	4	4	269	35,000	500
Gaithersburg.....	3	195	2	19	19	4	.....	4	975	20,000	1,500
Germantown.....	3	190	2	23	5	7	.....	0	200	5,000	100
Poolesville.....	3	180	2	16	12	4	.....	3	200	5,000	500
Rockville.....	4	180	7	40	27	19	13	12	360	40,000	5,000
Sandy Spring.....	4	180	4	18	14	5	4	3	259	5,000	500

III. SCHOOLS FOR COLORED CHILDREN.

Number, distribution, and kind.—There are 30 schools for colored children in the county, one to every 103 of the colored population of school age. They are all elementary schools with six or fewer grades. The number of schools for colored children, by election districts, are as follows: Laytonsville, 3; Clarkesburg, 2; Poolesville, 3; Rockville, 2; Colesville, 3; Darnestown, 4; Bethesda (a colored school was opened in Bethesda district in September, 1912), 0; Olney, 4; Gaithersburg, 3; Potomac, 1; Barnesville, 2; Damascus, 1; Wheaton, 2; total, 30.

These schools are so located that there is no considerable settlement of negroes anywhere in the county without a school reasonably accessible. In the Bethesda district, which is the only district without a colored school, the children go to the schools in the District of Columbia.

The colored schools are a part of the county school system, controlled, supervised, and maintained in the same manner as the white schools, but there is a feeling among many in the county that few of the negroes are taxpayers and that, consequently, the support of their schools by the county is more or less of a missionary enterprise.

The material equipment.—There are 28 school buildings, of which 23 are owned by the county and 5 are rented. One school holds its sessions in a church, and one occupies a room in a hall. These buildings contain in all 38 rooms, of which 34 were last year used for school purposes. Twenty-eight schools are one-room, one-teacher schools. This proportion raises the same problem as with the white schools. The colored children stand as much in need of training along industrial and agricultural lines as the white children. But the introduction of such courses into the curriculum of a one-room school is impracticable without good teachers and adequate supervision.

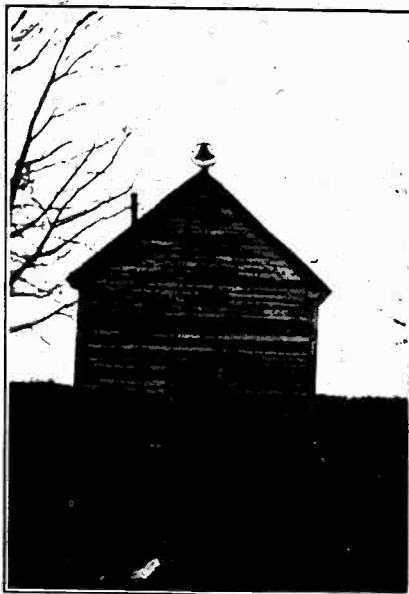
The school rooms vary in size from 374 square feet to 1,000 square feet. The average-sized room contains about 560 square feet of floor space. In more than one-half of the schools this is not sufficient



A. COLORED SCHOOL, LODGE HALL, AND CHURCH, NORBECK.



B. NORBECK COLORED SCHOOL.



A. TYPICAL COLORED SCHOOL.



B. TYPICAL COLORED SCHOOL.

for the accommodation of the pupils who desire to attend. In 16 schools the seating facilities were not sufficient for the number of pupils enrolled.

In all of these rooms the light comes from both sides, and in several it comes from both sides and the rear. In no instance is the light received either from the left only or from left and rear only. In at least 20 of the rooms the total amount of window space is insufficient, according to the rule that the total amount of window space should equal or exceed one-fifth of the total amount of floor space.

The average amount of blackboard provided per room is 48 square feet, enough to accommodate five pupils at the board at a time.

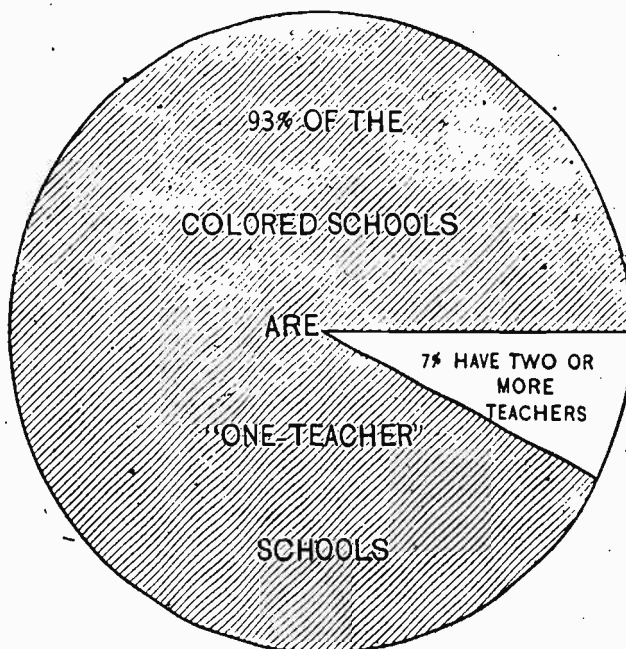


FIGURE 7.

Very few schools have as much board space as they need. In at least 10 schools the amount provided is wholly inadequate. With a single exception, the blackboard is placed from 30 to 42 inches above the floor. The average for all rooms is about 36 inches.

In 20 rooms there is provided some sort of decoration, mostly unframed pictures and posters. The walls of more than one-half were originally white, but age and use have reduced most of them to about the same condition, variously described as cream, buff, or drab.

In general, nearly all of the schools are in a more or less dilapidated condition. All the buildings are frame. Most of them were originally as well put up as the schools for white children, but they have

not been kept up. Consequently they are out of repair. Few of them have been painted. Their general appearance is one of neglect.

Twenty-eight of the 30 schools are equipped with double nonadjustable desks; one has single desks, and one, being a church, has pews. All of the buildings are heated by stoves, these being in 26 cases nonjacketed. Only one building has a cloak room, while none has a teacher's room. At 19 schools there is either a well, a spring, or a cistern on the school property; 11 have no water supply. All of the schools have outside toilets. At 14 schools these were in an insanitary condition, and at 10 they were improperly placed.

Twenty-one schools had globes, maps, and charts of some sort, although these are in many cases old and poor. Nine schools have none at all. The county furnishes the books for all pupils in the colored schools. Not very good care is taken of them by the pupils; consequently, there was usually found an insufficient number of books, and those found presented a very ragged appearance.

The total acreage of the school grounds is 24. All but 2 schools have at least a fair plat of ground, 7 of the lots are fenced, 16 are level, 12 are rolling or hilly, 6 have trees, 3 have flower beds, and 1 has a vegetable garden. Practically no attention is paid to beautifying the surroundings of the schools.

None of the schools has any play apparatus of any sort, and practically no provisions are made for the recreative life of the pupils. The school grounds are not usually very well adapted for playing games. Only three are provided with American flags.

The county has invested \$10,750 in the 23 school buildings which it owns. The average value per building is about \$470. The following table gives the number of schools owned, the total value, and the average value per school by election districts:

Buildings used for colored schools.

Election districts.	School buildings owned.	Total value.	Average value.
Laytonville.....	3	\$850	\$283.33
Clarksburg.....	1	500	500.00
Poolesville.....	2	800	400.00
Rockville.....	2	1,000	500.00
Colesville.....	3	1,300	433.33
Darnestown.....	3	1,300	433.33
Bethesda.....	0	0	0.00
Olney.....	4	2,700	675.00
Gaithersburg.....	1	250	250.00
Potomac.....	0	0	0.00
Barnesville.....	2	950	475.00
Damascus.....	1	350	350.00
Wheaton.....	1	750	750.00
Total.....	23	10,750	467.89

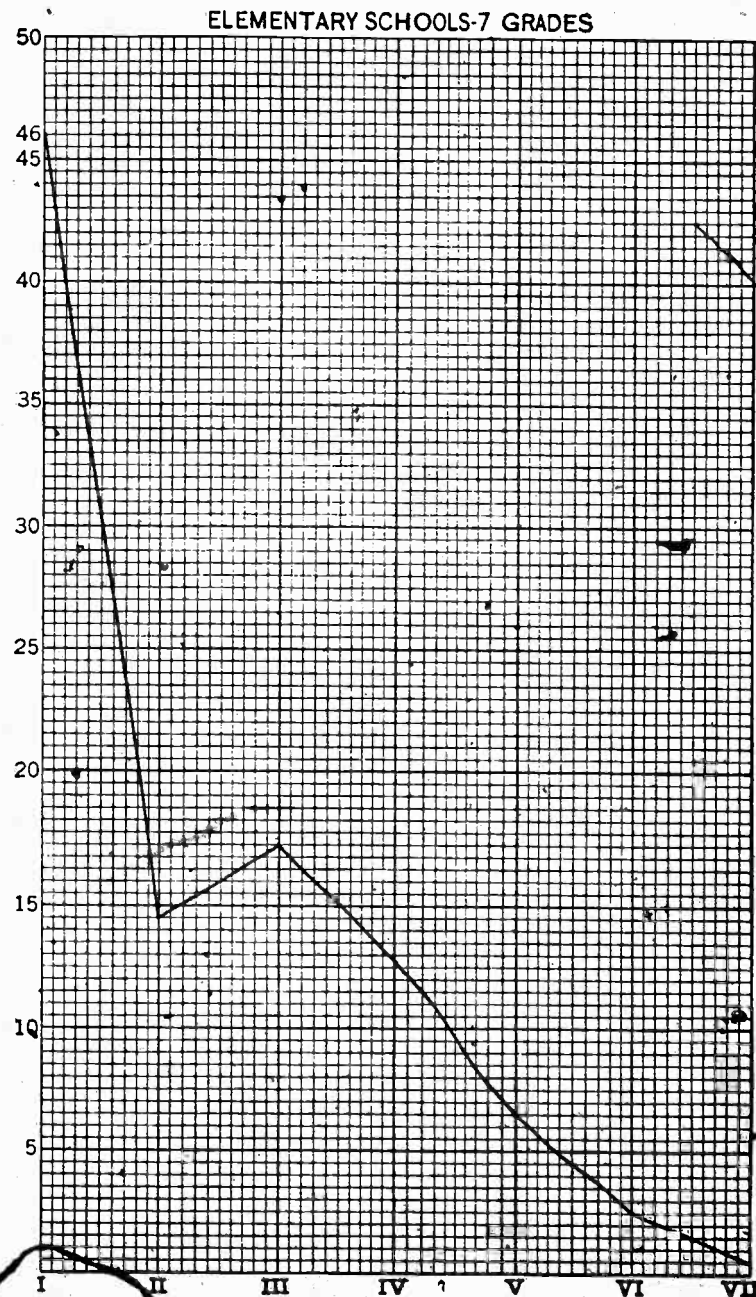


FIG. 3.—Enrollment by grades in the schools for colored children. (The figures at the left indicate the percentage of the total enrollment; the figures at the bottom indicate the grades. There are no pupils beyond the seventh grade.)

Teaching force.—The 30 schools have a teaching force of 33 (6 males and 27 females); 27 of these reported that they had had a normal or industrial school training. The average number of years of teaching experience is 9.6. Only 4 teachers were teaching for the first time last year. The average length of time spent in the present position was reported as 3 years. This average is in part due to a few cases of exceptionally long tenure, but more than one-half of the teachers have held their present positions 2 years or more. One-fourth of them have held their positions 4 years or more. The average number of positions held during the last 5 years was 1.8 per teacher. This means a more than ordinarily stable teaching force. The advice of the president of the colored teachers' association to the teachers on this point of tenure was brief but pithy: "Stay in a locality until you know it, and until you make the people love you; then leave it while they still love you." Of the 33 teachers, 30 declared that it was their intention to continue teaching permanently. The average salary paid last year was \$24.86 per month, or \$174 per annum.

The general education and professional training of the colored teaching force is as follows:

Teachers who have completed—

Elementary schools only.....	1
One year of high school.....	1
Two years of high school.....	1
Three years of high school.....	4
Four years of high school.....	10
One year of normal school.....	1
Two years of normal school.....	12
Three years of normal school.....	0
Four years of normal school.....	1
One year at college.....	2
Two years at college.....	1
Three years at college.....	1
Four years at college.....	3

38

Five teachers attended summer school for 1 year, 4 attended for 2 years, and 2 for 3 years.

Pupils.—The total enrollment of all schools last year was 1,782—918 boys and 864 girls. It will be noticed that for the county as a whole there is a decided drop in the enrollment after the fourth grade. In 2 districts this drop is postponed until after the fifth grade, but in no case is the enrollment kept up to the normal standard in the sixth and seventh grades.

EDUCATIONAL CONDITIONS.

45

Enrollment, by sex and by grades.

Election districts.	Male.	Female.	Total.	Grades.						
				First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.
Laytonsville.....	61	54	115	50	16	29	18	5	0	0
Clarksburg.....	51	49	100	45	25	12	6	8	5	0
Poolesville.....	122	122	244	125	34	30	29	10	8	2
Rockville.....	92	61	153	73	23	33	10	9	4	1
Colesville.....	96	79	175	88	32	29	29	35	4	0
Darnestown.....	78	69	147	77	9	23	19	6	5	0
Bethesda.....	0	0	0	0	0	0	0	0	0	0
Olney.....	167	174	341	135	56	67	29	22	3	4
Calithersburg.....	81	90	171	86	23	26	48	8	1	0
Potomac.....	31	28	59	30	6	9	6	4	4	0
Barnesville.....	63	66	129	68	13	24	16	3	2	2
Damascus.....	23	20	43	18	8	3	8	4	2	0
Wheaton.....	53	52	105	59	9	21	7	8	1	0
Total.....	918	864	1,782	1,804	254	303	223	112	39	9

¹ Under first grade is included a beginners' class and the first grade proper. A large number of pupils require two full years before taking second-grade work.

The total colored population of school age is 3,090. Of this number, according to the figures given, 57.6 per cent are enrolled in school. The average attendance is 1,087, or 36 per school, which is 60.9 per cent of enrollment and 35.1 per cent of the school population—5 to 20 years of age, inclusive. This means that only 35.1 per cent of the entire number of colored children of school age regularly attend school.

There were only 4 organizations for pupils, 2 of which were literary societies and 2 temperance societies. They had a total membership of 160.

Studies.—The length of the year's session is fixed by the county as 140 days. This term, it is generally felt by those in touch with the colored schools, is too short for satisfactory work to be accomplished. In certain school districts enough money was raised locally, by private subscriptions, to keep the schools open for 2 months longer. The average number of recitations held per day was 20 per teacher, and the average length of the recitation period was 18 minutes. The following table shows to what extent the 6 special subjects which we have previously mentioned were taught. The figures refer to the number of schools.

Number of schools in which certain subjects are taught.

Subjects.	Not at all.	Little.	Medium.	Much.
Nature study.....	20	8	3	0
Elementary agriculture.....	24	4	2	0
Domestic science.....	21	7	2	0
Manual training.....	19	8	2	1
Music.....	13	14	3	0
Drawing.....	12	18	0	0

Fair progress has been made in the work of introducing manual training and domestic science. The most interesting school in this respect is the Sharp Street Industrial School near Sandy Spring. This school offers complete courses in various forms of manual training work and domestic science. The need of these courses and their practical value for the colored children are readily seen, and efforts are making to introduce the work generally throughout the county.

In the spring of 1912 an industrial exhibition for all colored schools was held at Sharp Street. The results showed that, all things considered, in those schools in which industrial training is undertaken at all the work done is of a very high class.

The school as a social center.—It is probably true that the colored school fills a larger place, socially, in the lives of its patrons and pupils than the white school does. More than half the schools reported public entertainments of some sort, such as concerts, special programs arranged in celebration of holidays, etc. These were generally very well attended.

IV. THE SCHOOL BUDGET.

The total cost of the schools for the year 1911-12 was \$105,807.95. Of this amount \$78,897.01 was spent directly on schools for white children and \$6,158.41 on schools for negroes, as follows:

Expenditures for schools.

Items.	White schools.	Negro schools.
Fuel.....	\$3,045.22	\$526.05
Apparatus and furniture.....	714.70	39.46
Teachers' salaries.....	58,942.80	4,728.30
New buildings and repairs.....	6,599.43	165.98
Sanitary expenses and incidentals.....	2,075.38	105.62
Cost of books.....	4,511.00	462.00
Total expenses.....	78,897.01	6,158.41

The statement of receipts and disbursements for the year ended July 31, 1912, given by the county school commissioners, is as follows:

RECEIPTS.

Balance on hand July 31, 1911.....	\$2,540.28
State school tax.....	31,237.07
State free-school fund.....	2,297.78
County school tax.....	37,500.00
Interest on deposits.....	.86
High-school fund.....	6,500.00
Sales of books.....	58.00
Library fund.....	10.00
Brookeville fund.....	600.00
Free-book fund.....	4,139.08
Colored Industrial fund.....	1,500.00
Sale of abandoned schools (Spencerville, \$310; Old Germantown, \$75)...	385.00
Proceeds of notes.....	13,500.00

EDUCATIONAL CONDITIONS.

47

Tuition fees received from adjoining counties.....	\$303.50
Darnestown fund.....	500.00
Anticipation county commissioners.....	10,000.00
Refund.....	46.00
Sale of coal (1-4, \$63; 1-9, \$38.90).....	101.90
Rent hall, 1-7.....	50.00
Sale from agricultural department.....	3.44

111,272.87

DISBURSEMENTS.

Rent.....	\$867.50
Fuel.....	4,171.27
Repairs.....	5,291.41
Apparatus and furniture.....	754.16
Teachers' salaries.....	63,671.10
New buildings.....	1,473.99
Sanitary costs.....	301.58
Incidentals.....	1,879.42
Kindergarten and manual training.....	1,671.99
Office expenses.....	150.52
Salaries of secretary, treasurer, and county superintendent.....	1,400.00
Salary of assistant.....	750.00
Salaries of school commissioners.....	600.00
Commissioners' incidentals.....	44.94
Tuition fees paid to adjoining counties.....	102.50
Colored industrial department.....	1,785.79
Commencement exercises.....	50.00
Discount and interest.....	1,352.15
Superintendent's traveling expenses.....	250.00
Agricultural department.....	1,224.72
Commercial-course expenses.....	1,193.55
Record books.....	53.00
Printing.....	337.15
Domestic science.....	818.62
Advertising.....	154.75
Telephone.....	103.30
Freight and drayage.....	268.64
Term reports.....	63.15
Stamps and stationery.....	153.70
Insurance.....	398.28
Expenses of institutes.....	322.42
Furniture to schools.....	1,121.31
Expenses of State and county association.....	156.00
Free books and distribution.....	4,989.72
School libraries.....	35.00
Examinations.....	181.45
Auditing accounts.....	62.50
Teachers' registers.....	45.00
Attorney's fees.....	30.00
Bonds.....	90.00
School supplies.....	447.37
Notes paid.....	7,000.00
Balance cash on hand, July 31, 1912.....	5,464.92

111,272.87

¹ Armour Co., \$17.44; W. J. C. Dulany Co., 68 cents; Woodside trustees, \$26.77; domestic science, \$1.11.

The total amount raised during the year, excluding the balance on hand at the beginning, was \$108,732.59. This money came from the following sources:

	Per cent.
From the State.....	42.0
State school tax.....	28.7
State free-school fund.....	2.1
High-school fund.....	6.0
Free-book fund.....	3.8
Colored industrial fund.....	1.4
From local sources:	
County school tax.....	34.5
Proceeds of notes.....	12.1
Loans in anticipation of the county commissioners.....	9.2
Other sources.....	1.9
	100.0

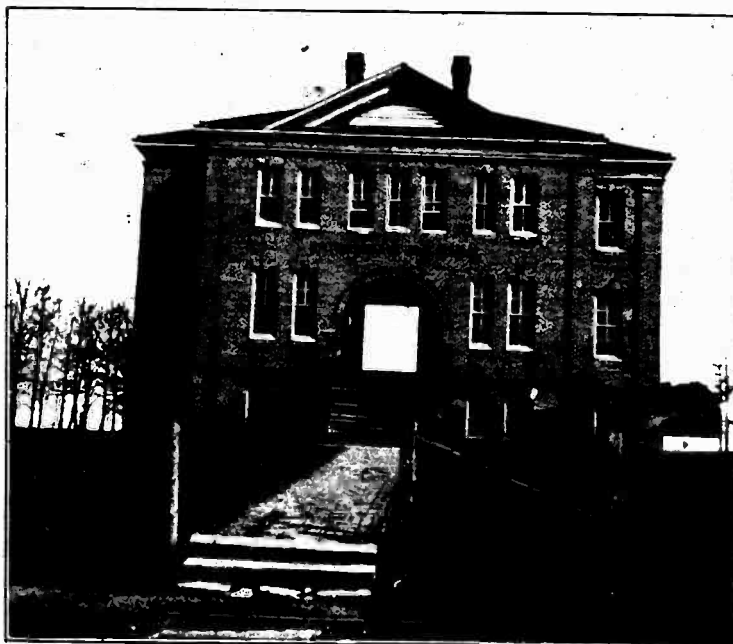
The expenditures grouped under the general headings used by the United States Bureau of Education in classifying school expenditures are as follows:

	Per cent.
I. General control (school board, superintendent and office expenses).....	3.9
II. Instruction:	
Salaries of teachers.....	60.0
Textbooks, stationery, supplies.....	11.9
III. Operation and maintenance of school plant (fuel, repairs, etc.).....	11.8
IV. Miscellaneous.....	4.5
V. Liquidation of debts (bonds, loans, etc.).....	6.6
VI. Interest on indebtedness.....	1.3

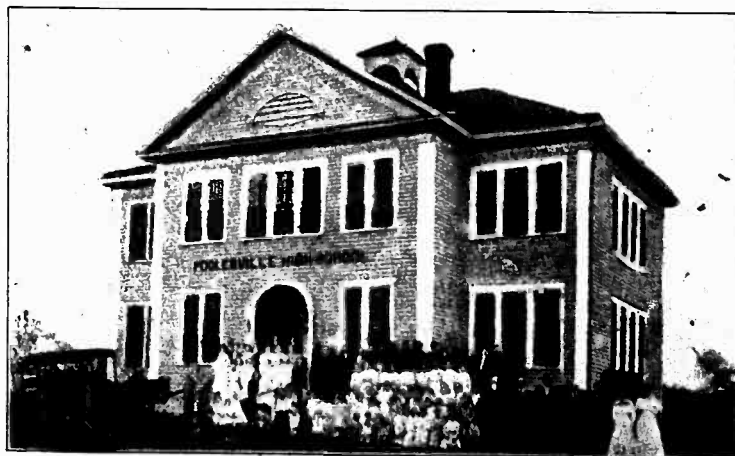
Data for 1911-12 showing the amount expended in each election district were not available at the time of this survey. The figures for 1910-11 were obtained, and are as follows:

Expenditures for schools for whites and for colored.

Election districts.	White schools.				Colored schools.		All schools, grand total.
	Salaries.	Apparatus, new buildings and repairs.	Fuel and incidentals.	Total.	Salaries.	Total.	
Laytonsville.....	\$4,152.50	\$31.00	\$253.23	\$4,678.73	\$450.80	\$526.81	\$5,205.54
Clarksburg.....	4,551.58	158.00	1,139.31	5,411.54	324.40	406.47	5,818.01
Folesville.....	2,675.10	1,085.35	373.39	4,374.84	499.20	601.52	4,774.84
Rockville.....	7,802.50	1,413.08	486.50	11,528.53	490.00	587.27	11,528.53
Colesville.....	3,313.48	5,155.02	323.57	9,045.07	457.89	605.85	9,045.07
Darnestown.....	3,663.73	224.06	180.59	4,299.36	573.50	701.87	4,299.36
Bethesda.....	2,579.15	10.75	147.48	2,881.38	0.00	0.00	2,881.38
Olney.....	5,434.55	623.79	568.79	8,300.13	1,599.50	3,064.82	11,364.95
Gaithersburg.....	5,531.80	8,717.95	462.04	15,215.23	479.00	687.81	15,903.04
Potomac.....	2,331.30	33.46	187.02	2,761.78	183.40	196.50	2,958.24
Barnesville.....	2,978.13	49.55	208.88	3,455.45	344.00	478.14	3,931.59
Damascus.....	4,184.75	4,776.79	175.00	9,499.78	144.00	194.62	9,694.36
Wheaton.....	7,181.08	991.81	732.24	10,319.77	317.00	388.40	10,718.17
	56,381.64	23,270.55	5,220.25	99,771.59	5,852.69	8,448.08	108,219.67



A. GAITHERSBURG HIGH SCHOOL.



B. POOLESVILLE CONSOLIDATED SCHOOL.



A. ROCKVILLE ACADEMY.



B. DOMESTIC SCIENCE BUILDING, BROOKVILLE HIGH SCHOOL.

The total expenditure for the county for 1910-11, based on the average daily attendance, and including the expenditure for new buildings, amounted to \$37.83 per white pupil and \$7.77 per colored pupil per year. The money spent for supervision, office expenses, etc., divided equally among all pupils, colored and white alike, assuming that each shares equally in advantages which it purchases, would be \$2.72 per pupil. This would make the total average cost of education for each white pupil in average daily attendance \$40.55. The annual expense for each colored pupil, figured in this way, would be \$10.49 per year. The following table gives, by election districts, the average cost for white and colored pupils. The variation between districts is partly accounted for by the difference in the amount spent last year for new buildings and repairs upon the schools of certain districts.

Cost of schools per capita of average attendance.

Election districts.	White pupils.	Colored pupils.
Laytonsville.....	\$31.77	\$9.22
Clarksburg.....	24.99	8.14
Poolsville.....	31.99	7.34
Rockville.....	31.68	8.96
Coltsville.....	75.08	9.06
Jamestown.....	30.28	10.15
Bethesda.....	26.33	No schools.
Olney.....	36.45	18.91
Gaithersburg.....	76.38	8.59
Potomac.....	91.19	7.51
Barnesville.....	32.00	7.89
Damascus.....	47.94	16.62
Wheaton.....	31.23	8.75
Average, entire county.....	40.55	10.49

If the cost of the new buildings is omitted, the total cost per white child amounted to \$30.90. This, including the \$2.72 for administration, amounts to \$33.62. The white schools cost, therefore, for maintenance more than three times as much per pupil as the negro schools. Including the cost of new buildings, the county expended 3.87 as much on every white child in average daily attendance as on every negro child.

V. PRIVATE EDUCATIONAL INSTITUTIONS.

There are six private educational institutions in the county—the Rockville Academy; Miss Simpson's Primary School, at Rockville; the Bliss Electrical School, at Takoma Park; the Chevy Chase College and Seminary; the National Park Seminary, at Forest Glen; and the Washington Foreign Missionary Seminary, at Takoma Park. Only the first two and the last have direct local importance. The Rockville Academy was established over 100 years ago and has been maintained continuously ever since. It was one of a group of four

academies, of which the other three—the Darnestown Academy, the Brookeville Academy, and the Sherwood School, at Sandy Spring—have been taken over by the county and made part of the public school system. The Rockville Academy, however, continues as a private institution. It has practically the same course as the public schools, beginning with the sixth grade and continuing through the high school. It has a well-equipped brick building with fine grounds. The enrollment last year was about 40. The faculty consists of two men. Its pupils are drawn from Rockville and vicinity, all living in the county. Miss Simpson's school has an average enrollment of about 20, all from Rockville. The school is held in a private home, which is, however, very conveniently arranged.

The Washington Foreign Missionary Seminary is the only other school which draws pupils from within the county. This is a training school for candidates for the foreign mission field, and is operated by the Seventh Day Adventist denomination in connection with a large sanitarium at Takoma Park. Academic work of high-school grade is offered, and a number of pupils from the town of Takoma Park are enrolled in the school. The number, however, is never very great. The majority of the students come from other States. The equipment of the school is very complete, and its grounds are beautifully arranged.

The Bliss Electrical School offers a one-year course in electrical engineering and similar subjects. It has two buildings, with classrooms and laboratories and several dormitories. It has a faculty of seven. The graduating class of 1911 numbered 104. It had in 1912 no pupils from Montgomery County or from the State of Maryland. The two girls' seminaries in the county draw nearly all their students from other localities. They have considerable influence upon the social and educational life of their respective neighborhoods and have some economic significance in that they furnish employment for a considerable number of residents. Otherwise they are not locally important. Each school has beautiful grounds and splendid buildings.

Chapter III.

PATRONS OF THE PUBLIC SCHOOLS.

In order to estimate the significance of the public-school system and to place the proper value upon the work which it is doing, it is necessary to ascertain what place it actually fills in the life of the community. The first step toward this end is to consider the schools objectively, i. e., to investigate the material equipment, the teaching force, the enrollment and attendance, and all the various activities of each individual school. The second step is to study the attitude of the people toward the schools in order that a correct understanding may be had of what the schools mean to the people. The latter study was undertaken. The inquiry was made for the following purposes:

(a) To determine whether in the opinion of the school patrons the schools as actually operated were serving their respective communities in a satisfactory manner.

(b) To determine what the patrons consider to be the principal weaknesses of the local schools, and of the general school system of the county.

(c) To obtain suggestions from the patrons for school improvement.

(d) To secure statements expressing their attitude toward the adoption of a policy of consolidation of schools with the transportation of pupils at public expense.

(e) To secure information relative to the general temper and attitude of the people of the county toward education.

The study was made in the following manner: In the course of the general survey of the county, investigators discussed various phases of the school question both privately, with representative men and women, and publicly at meetings of farmers' clubs and similar organizations. In addition to this, a questionnaire was prepared and sufficient copies were sent by the county superintendent of schools to all the public-school teachers in the county, so that they might obtain from the heads of families in their districts written answers to the six more or less pertinent questions on the blanks. These questions were as follows:

1. What, in your opinion, are the principal weaknesses of the country school?
2. Do the schools need a different course of study?
3. How may they serve the community other than as an ordinary day school for children?
4. Do you think consolidation of schools and the transportation of pupils in school wagons feasible?
5. Are the schools as they are now operated satisfactorily progressive?
6. What would you suggest to improve them?

The total number of public-school patrons in the county was roughly estimated as about 2,800, of which number 2,000 were patrons of white schools and 800 of the colored schools. Both groups were included in the investigation. About 2,000 blanks were distributed and about 700 were returned filled. The investigators labored under no delusion as to the efficacy of the questionnaire method to finally exhaust any subject. They appreciated thoroughly the danger of trusting too implicitly in the accuracy and value of answers to set questions asked in this fashion. Also they realized that the number of blanks returned was hardly a sufficient proportion of the whole number to form a safe basis for any very definite final conclusions. The answers, however, seemed quite representative. They came from all classes and conditions of people, and represented all degrees of education and general enlightenment. Moreover, though differing widely from each other in many particulars and including many shades and varieties of opinion, there are yet certain general lines of cleavage running through them all.

As a result, then, of the two lines of inquiry followed, certain conclusions seem safely established. First, in relation to the white schools, it is apparent that on the whole the county has pride in its present school system and is satisfied that its present administration is making substantial progress along the right lines. Fifteen per cent of the patrons answering offered no criticisms at all, favorable or otherwise. Sixty-five per cent stated that they considered the schools satisfactorily progressive and gave reasons for their belief. Many others indorsed the school administration, but included adverse criticisms and suggestions for improvement.

The chief criticisms advanced were aimed, not so much at the method of conducting particular schools or at any particular points in the methods of supervision and general administration practices in the county, as at the *whole principle involved in such a school system*. Implicitly and explicitly the one-room one-teacher school was attacked. Certain weaknesses of the schools which exist principally in such schools were clearly indicated. Certain remedies involving fundamentally a departure from such schools were advocated. Yet it was evidently not often clear in the minds of the writers where the remedy for the defects which they pointed out must inevitably lead, or what sort of a reconstruction the reforms which they suggested would make necessary.

Approximately 75 per cent of the answers received are covered in effect by the following criticisms:

- (1) There are too few teachers for the amount of work to be covered. Each teacher is compelled to teach too many grades.
- (2) The common branches are not taught with sufficient thoroughness, and yet the special branches of particular value to country pupils can not be undertaken at all.

(3) There is no room in the curriculum for specialization, nor would the teachers be able to prepare themselves for it if there were.

(4) The salaries are too low, and in consequence there are too many relatively inefficient, poorly trained teachers.

(5) There is no proper inducement for highly trained men and women, desirous of making teaching a life work rather than a temporary means of gaining a livelihood, to devote themselves to the work of education in the country.

(6) The buildings and equipment are not always up to the standard, and the rooms are frequently overcrowded.

(7) The work is not carried far enough in those schools upon which a majority of the pupils are dependent. In many sections pupils desiring work beyond the seven or eight grades offered in the one-room schools must travel away from home to obtain it. The children of poorer families are not able to go away from home to school, consequently their education is brought to a premature close.

The attendance of pupils, particularly of the younger pupils, is very irregular whenever weather and roads are bad, and consequently satisfactory results are hard to obtain. These are all conditions which would be in large measure eliminated by closing the small schools and providing educational opportunities in a single school centrally located.

The demand for more highly specialized courses of study was particularly insistent. There was a widespread feeling expressed that the country schools do not prepare adequately for country life. Suggestions which found many supporters had to do with the introduction of classes in agriculture and nature study, in domestic science and manual training, and in the principles of business procedure. Such courses are already given successfully in a number of the schools of the county. Other districts wish the same advantages. As one instance of this feeling, a recent meeting of the Goshen Farmers' Club may be cited. For five hours the following proposition was discussed: A large sum of money is now raised by taxation in Montgomery County for the support of the Maryland Agricultural College; is Montgomery County getting the largest possible return for the money spent, or might not a larger return be received if the money were used in the county for teaching the principles of agriculture in the public schools? The 30 representative farmers present finally put themselves on record as in favor of the following propositions: That the principles of scientific agriculture by all means ought to be taught to country children; that the proper medium for this is the public school; that, therefore, such courses ought to be established in every school; and, finally, that the money now raised for the support of the agricultural college would produce better results if used to teach agriculture in the public schools. At a meeting of the Montgomery Farmers' Club of Sandy Spring a similar proposition received

the general support of those present. This indicates the attitude of the progressive and thinking farmers throughout the county. They are ready to have the ordinary branches of study supplemented by these special branches, but do not recognize the difficulties in securing instruction in these subjects as long as the school system contains so many isolated one-teacher schools.

All the defects in the schools which are mentioned by the patrons are inherent in a system of separate one-room schools. The condition is one which the school administration is helpless to remedy, unless public sentiment will support a sweeping policy of reconstruction and reform. The school administration is dependent upon the sentiment of the people, not only to furnish adequate funds but also for moral support. Both of these must be forthcoming in larger quantities before any fundamental reconstruction can take place.

There are two ways to remedy the conditions. One way would be to decrease the present number of schools, making each school at least a two-room, graded school, equipped with modern appliances; to increase the salaries paid teachers, thus attracting to these schools trained, efficient men and women; and in addition to provide specialists to teach the various branches of agriculture, domestic science, manual training, business, music, and drawing in each and every school.

The other way is to abolish as rapidly as possible the crossroads one-room school, with its one poorly paid teacher struggling to teach 30 or more pupils in seven or eight different grades, and to establish at convenient centers consolidated or centralized schools. Grades of high-school rank could be added to every such school, and teachers with special training for agriculture and domestic science be provided to teach those subjects now almost necessarily omitted from the curriculum. Public transportation could be provided for the pupils, thus doing away with irregular attendance on account of bad weather and poor roads. However, the people in those districts which suffer most under the present system are not yet ready to indorse the establishment of consolidated schools. The opinions among all the school patrons as expressed in the returns to the questionnaire were two to one against consolidation with public transportation of pupils.

It is not the purpose here to attempt to include a discussion of consolidation. A brief statement only will be given to point out that in a consolidated school it is quite possible to remedy the defects and meet the demands mentioned by the school patrons; to broaden the curriculum, increase the number of grades, and at the same time raise the standard of teaching efficiency. Several thousand consolidated schools in the United States testify to the success of the plan. The cost is not prohibitive, for the expense of such a school is but

little, if any, more than the expense of maintaining the schools which it displaces. The Baltimore County Agricultural High School, a consolidated school with a high-school department, provides training of the mind and couples with it an extensive and varied service to the community as a whole at a total cost per year of only \$34 per pupil. The schools in Montgomery County cost \$40.55 per pupil. In the strictly rural schools the cost is at least \$30.

The question of consolidation is a point on which there needs to be much public education. The term "education" is used advisedly. At the present time, judging from the results of the inquiry, the term "consolidation" is entirely misunderstood by a great many who oppose it in Montgomery County. Many fear that public transportation of school children would never be satisfactory because attended by such grave moral dangers to the children or because they would be subjected to exposure while waiting for the wagon. These difficulties have not been found insurmountable where children are transported. As evidence that many did not understand what was involved in the query regarding their opinion of consolidation included in the inquiry a few answers might be quoted. One man replied: "I did not know that the schools had a wagon in them to transfer the pupils to the different rooms." Another wrote: "No; the children are away from home too long as it is." A third declared that he "did not think it right for the school children to hang on the wagons passing along the road."

Aside from these other interesting criticisms were made touching points more easily dealt with. For example, many asserted the chief weakness of the schools to be in the lack of intelligent cooperation on the part of parents and trustees. They asserted that a teacher could not be expected to conduct a school to the entire satisfaction of a community unless she had such cooperation from the patrons and the board of trustees. Others pointed out defects in ventilation, or lighting, or sanitary conveniences, or expressed regret at the lack of proper playgrounds, recreational facilities, and attractive surroundings. These things they considered an important part of the school's equipment. Still others very properly advocated the elimination of politics from the school system. One wrote in language that deserves to become classic: "I respectfully suggest that the school secure a divorce from politics and sees to it that politics gets a life sentence at hard labor."

Others suggested a compulsory school-attendance law.¹ A more uniform and careful grading of the schools to facilitate passage from one school to another in case of removal; some system of moral training; facilities for giving proper attention to deficient and backward children are all points deserving careful consideration.

¹ Such a law has since been passed by the State legislature and becomes effective in Montgomery County in the fall of 1912.

The question as to whether the school could serve the community other than as an ordinary day school for children was asked in view of the possibility of making the school something of a neighborhood center, ministering to the community as a whole as well as dispensing elementary knowledge to its youth. Many of the answers anticipated this conception of the school's possible function. "Make it a social and civic center" was frequently suggested. "Make it a place where the school patrons may meet both formally and informally to discuss questions of mutual interest and import." Few of the schools are at present doing anything of this sort for their patrons, but this is a field possible of extensive development, which should add materially to the school's value to a community.

By the fifth question, "Are the schools as they are now operated satisfactorily progressive?" it was desired to learn if the people felt that the school administration has been making sufficiently substantial progress in adapting the schools to changing conditions and in keeping up with modern ideas of school administration, equipment, and teaching methods. Of course it was discovered that there are some who have no conception of progress, either of its nature or of its reason for being; who feel, as one expressed it; "that we have the same old arithmetic, a geography describing the same territories, and the same methods of spelling; why should the school be progressive?" Why, indeed! "The school is good enough as it is, so let it be." For the most part, however, the attitude of the patrons was that progress is necessary and that the schools have been making it to a satisfactory degree, and that, taking everything into account, they are doing all that can reasonably be expected of them.

Taking the county over, it is undoubtedly true that the patrons are not sufficiently impressed with their responsibility toward the school. It has already been remarked that the school provides the community, in its present state of organization, with its one great opportunity to act as a unit. In their religious life they are split up into denominations and factions; in their struggle for economic advancement they are working as individuals and not as a group. But the school is the property of the whole community and furnishes practically its only opportunity for concerted action. The people have, however, almost uniformly failed to grasp the full significance of this opportunity and have hampered the school administration, sometimes by their total indifference, sometimes by active criticism and opposition to progressive policies, and always by not giving them sufficient funds to carry out their plans. Several happy exceptions are to be recorded. The Sandy Spring school was recently remodeled and the Woodside school was built with a large amount of local help. These two schools especially are receiving the intelligent and able cooperation of their communities.

The situation as regards the attitude of the colored patrons is more simple. Little needs to be said, but that little may be said with emphasis. The same opinions were uniformly expressed by intelligent and ignorant alike, by preacher and layman, by teacher and patron. These all said in substance: "Give us a longer school term; give us better school buildings and equipment; pay our teachers more nearly adequate salaries; add to the curriculum courses in manual training and domestic science and extend the course of study through the eighth grade."

Three ways were suggested by which the schools might enter upon a larger service for the colored population. These were to conduct a night school for those who had been compelled to leave school early, to have classes in domestic science and industrial training out of school hours for any of the patrons who felt the need of instruction along those lines, and, lastly, to make of each school a social and civic center. As to the progressiveness of the schools, the opinion was about evenly divided.

In general, it must be said that the patrons of the negro schools display a most commendable interest in their welfare and progress. As we have said before, in several instances they are raising funds and keeping the schools open two months longer than they would be otherwise. In other respects they are for the most part ready to assist the teachers and respond gratefully to their influence.

Chapter IV.

GENERAL SUMMARY AND RECOMMENDATIONS.

In this discussion of the educational conditions attention has been called to what appear to be defects in the public-school system; in the buildings and equipment, in the management, or in the general policy of administration. A model county demands a model school system. The existing school system has been compared with the ideal. The comparison may create an impression that the schools of Montgomery County are not as adequate and efficient as the schools of the State as a whole. This is not true. Montgomery County schools compare very favorably with those of the other counties of Maryland. However, they, with the others, fall short of the ideal of the school system necessary if the country children are to receive equal educational opportunities with those of the best American cities.

Summing up conditions, the chief weaknesses noted are as follows: The preponderance of one-room schools and the absence of consolidation; defective methods of lighting, heating, ventilation, and of seating pupils; the lack of organizations for pupils and of recreation facilities; the low proportion of children of school age enrolled or in regular attendance; the slight attention paid to the beautifying of the surroundings of the school buildings; and the absence from the curriculum of studies preparing for country life. Over against these weaknesses we must cite other and very important sources of strength: Direct and capable supervision; uniform grading; a sufficient number of buildings in good repair; a teaching force experienced, relatively stable, and efficient; a fair beginning of introducing into the curriculum those subjects most closely adapted to rural needs; and a number of high schools which in equipment and in the grade of work done are well above the average for similar communities.

In view of the facts brought to light by the study, several recommendations are offered:

Organization and supervision.—The management of the schools of Montgomery County, as in all Maryland counties, is centralized in the hands of one board of education. Such a system is known as the "county system" of organization and is probably the most efficient and economical of all systems for rural schools in the United States. Only four other States are so organized. Under this

system are provided the best opportunities to promote the educational interests of the entire county. Under no other form of organization has such rapid development taken place in rural school affairs, except under the township organization as found in New England and in a few other States. The township system, however, has proven especially efficient only in thickly settled sections. Any system to be effective must have at the head of its school affairs a board of education composed of capable persons who will perform their duties for the best interests of the schools and the communities, regardless of the demands of political party affiliations. The Montgomery County board is unquestionably composed of capable men, and in the management of school affairs it seems to be free from political influence.

The school system of the county is weak in the amount of supervision given the teacher in her work both in managing the school and in teaching. Expert supervision is given by but one person—the county superintendent—and he must divide his time between work as an agent of the county board in the management of the school affairs of the county and as a supervisor of the teachers and their work. The county includes approximately 521 square miles of territory, with 106 separate school buildings distributed quite evenly over the entire county. There are 162 teachers. Under such conditions little personal supervision is possible. The school year is approximately 180 days in length, the school being in session 5½ hours per day, or a total of 990 hours in the entire year. If the county superintendent could spend this entire 990 hours in the schools while classes were reciting, he could give but 9 hours to each building during the entire year and but 6 hours to each teacher. In actual practice he can not devote more than one-half of his time to visiting schools, and part of this time is consumed in driving from one school to another.

Contrast this condition with the amount of supervision in the city of Baltimore. In 1910 there were 58 supervisory officers devoting half or more than half of their time to supervising the work of the 1,778 teachers employed. And the city was criticized in "The Report of the Commission Appointed to Study the System of Education in the Public Schools of Baltimore" because the supervision was considered by the experts who made the study *inadequate in amount!* Baltimore had but one such supervisor for every 32 teachers, while the average for the 18 largest cities in the United States that year was one for every 19 teachers. It is on account of this supervision in city systems that the great progress has been made in city schools and for the lack of it that the country schools have failed to keep pace. In every business enterprise but public

¹ The county superintendent has an office assistant but no field assistant.

education it is recognized that to obtain the best results supervision from bottom to top is essential.

With the present number and distribution of schools Montgomery County should employ at least 3 assistant superintendents, who would devote their entire time to supervising the work of the teachers. This would give 1 to every 35 schools, or 1 to every 54 teachers. The amount of supervision would still be inadequate, but would be a vast improvement over the present amount. These assistants should be under the direct authority of the county superintendent. Each should be assigned a definite part of the county, so that they would come to know their schools and their patrons, and could acquire close, definite information relative to their district, not only as regards educational affairs, but all interests of the community. It is only when in possession of such knowledge that it is possible for the supervisors to so direct the schools and their work that they would fill more nearly the place which the country schools should occupy in their communities.

Other counties in Maryland are seeing the necessity of assisting the county superintendent in his field work. Four are now employing assistant superintendents to visit schools and assist and supervise their work; four employ from one to six special supervisors, such as a "primary supervisor," "rural school supervisor," etc.

The course of study.—The curriculum of the schools of Montgomery County includes little but the common branches which have been taught in country and city schools for the past decade. A readjustment is desirable, so that the studies pursued would be more closely correlated with the life and interests of the community. More time and attention should be given to instruction in elementary agriculture, domestic science, manual training, music and drawing, and the common branches should be taught in terms of these subjects. It is realized, of course, that the ordinary country teacher herself can not do much to bring about this readjustment, on account of lack of training and lack of information relative to how the readjustment may be effected. The county superintendent alone, with the manifold duties thrust upon him, can do but little. Such readjustment and redirection of the work of the schools can be accomplished satisfactorily only by a county superintendent assisted by several supervising officers working under his authority and direction, who can direct and aid the teachers in the introduction of work in these newer subjects and in establishing the proper balance and relationship between them and the older subjects. The problem is greater than the mere addition of new studies to the curriculum. Under present conditions the average teacher in the one-teacher country school conducts about 26 recitations per day of approximately 12 minutes in length. There is no time for additional classes. The

new subjects must be taught by means of and through other subjects already in the curriculum in place of useless portions now included. Such being the case, the necessity of expert supervision is made all the greater.

Number of schools.—The number of schools contained in the county, from the standpoint of efficiency and economy, is too great. There are 69 elementary schools for white children, or one for every $7\frac{1}{2}$ square miles of territory. This means that, if the schools were symmetrically distributed, no part of the county would be more than 2 miles from a school, 90 per cent of the territory would be within $1\frac{1}{2}$ miles, and 42 per cent within 1 mile. If the number of schools for white children should be decreased to 35, there would be one school for every 15 square miles. If the schools should be located at the center of squares 15 square miles in area, or less than 4 miles on a side, one-fifth of the territory would be within 1 mile of the school, four-fifths within 2 miles, and the farthest point would be but 2.8 miles from the building. By a proper arrangement taking into consideration the geographical features of the country and the location of the population, the 35 schools could be so placed that approximately 95 per cent of the school children would live within 2 miles of a school and at least 60 per cent within 1 mile. Under such conditions transportation at public expense would be necessary only on exceptional days, as the children would be within walking distance. While it might not be possible to extend the area for each school to 15 square miles, there are many sections where consolidation with transportation of pupils at public expense is entirely practicable and where the school might serve an area of 25 square miles.

Decreasing the number of schools would not lessen the number of teachers in the county to any great extent, as the number of pupils to each teacher under present conditions is high. It would, however, increase the size of each school to two or three-teacher schools with enough pupils to permit a classification in such a way that the efficiency of the teaching would be doubled or trebled. It would allow also adequate expert supervision at a comparatively small cost and would decrease the cost of maintenance appreciably. It would mean a much more efficient school service at about the present outlay.

On the whole the white schools of Montgomery County may be said to rank high in the excellence of their work in comparison with other county systems. The same may be said about the negro schools, although they are relatively inefficient as compared to the white schools of the county and are poorly housed, equipped, and supported. It is probably true that the county is expending upon the negro schools an amount as great as is paid by the negro population in direct taxes. It is becoming a recognized principle of economy, however, that the responsibility of a city, county, or State to its

people or to any part of them for the best interests of all the people in the political unit can not be measured in terms of the direct taxes paid.

The criticism made relative to the lack of supervision and to the overabundance of small schools would apply equally as well to the larger number of counties in the majority of States in the Union. From the 2,000 inquiries made during the recent survey of the county a general appreciation of these two needs seems to exist.

In concluding this discussion of the educational conditions, the investigators desire to express their appreciation of the kindness of all those whose assistance made the survey possible. In particular they are indebted to the teachers in the public schools, who all cooperated with them in the work, and to Mr. Earle B. Wood, the county superintendent of schools, who not only extended every personal courtesy, but also assisted the progress of the investigation in every way possible.

APPENDIX.

Table No. 1.—How the total value of farm property is distributed.

Land in 1910.....	\$12,678,278
Land in 1900.....	9,491,930
Buildings in 1910.....	5,163,690
Buildings in 1900.....	3,525,179
Implements and machinery in 1910.....	733,843
Implements and machinery in 1900.....	576,010
Domestic animals, poultry, etc., in 1910.....	2,282,768
Domestic animals, poultry, etc., in 1900.....	1,486,568
Per cent of value of all property (1910) in—	
Land.....	60.8
Buildings.....	24.8
Implements and machinery.....	2.5
Domestic animals, poultry, etc.....	10.9
Average values (number of all farms, 2,442):	
All property per farm.....	\$8,542
Land and buildings per farm.....	7,306
Equipment and stock.....	1,236

Table No. 2.—How the land is held—Size of farms.

Size of farms.	Per cent of all farms operated by white farmers.	Per cent of all farms operated by colored farmers.
19 acres or less.....	17.67	66.3
20-49 acres.....	13.4	16.0
50-99 acres.....	18.2	6.6
100-174 acres.....	24.46	5.4
175-259 acres.....	13.23	1.7
260-499 acres.....	11.61	.9
500-999 acres.....	1.33	

Table No. 3.—How the land is held—Kind of tenure.

	Per cent of all farms operated by—	
	White.	Colored.
Owners.....	68.7	71.3
Owner and tenant.....	.1	.6
Part owner.....	5.8	7.4
Tenants.....	21.7	19.4
Unclassified.....	3.7	1.3

Table No. 4.—The age of farmers.

Age.	Per cent of total number white farmers.	Per cent of total number colored farmers.
24 years and less.....	3.2	0.6
25-34 years.....	15.8	11.6
35-44 years.....	24.3	16.1
45-54 years.....	23.0	26.2
55-64 years.....	18.8	24.7
65 years and over.....	13.6	21.6

Table No. 5.—Distribution of public roads.

District.	Macadamized and ordinary pikes.				Dirt.	Grand total.
	State built.	County built.	Turn-pikes (toll road).	Total stone.		
Laytonsville.....	3,800	0,435	—	4,235	56,550	60,55
Olney.....	1,295	1,840	9,750	12,875	61,875	74,75
Damascus.....	—	—	—	—	60,500	60,50
Clarksburg.....	4,875	340	—	5,215	65,796	71,00
Gaithersburg.....	735	2,445	—	3,170	51,290	58,54
Darnestown.....	3,000	—	—	3,000	59,250	62,25
Barnesville.....	—	4,590	—	4,590	57,450	62,00
Poolesville.....	—	2,450	—	2,450	76,300	78,75
Rockville.....	4,670	7,650	—	12,320	50,450	62,75
Potomac.....	—	4,500	—	4,500	44,750	49,25
Bethesda.....	—	12,570	—	12,570	37,180	49,75
Colesville.....	—	8,500	375	8,875	45,375	54,25
Wheaton.....	1,295	9,840	14,125	25,250	60,250	85,50
Total.....				99,040		829,88

Table No. 6.—Census table showing population by districts and towns for 1890, 1900, 1910.

	In 1910.	In 1900.	In 1890.
Montgomery County.....	32,089	30,451	27,185
District 1, Laytonsville, including Laytonsville town.....	1,866	1,981	1,950
Laytonsville town.....	133	148	—
District 2, Clarksburg, including Hyattstown town.....	1,995	2,013	1,812
Hyattstown town.....	88	81	—
District 3, Poolesville, including Poolesville town.....	2,170	2,343	2,416
Poolesville town.....	175	236	—
District 4, Rockville, including Rockville town and part of Garrett Park town.....	3,450	3,488	3,045
Garrett Park town (part of).....	111	175	—
Total for Garrett Park town in districts 4 and 7.....	185	175	—
Rockville town.....	1,181	1,110	1,508
District 5, Colesville.....	2,234	2,192	2,280
District 6, Darnestown.....	1,680	1,675	1,681
District 7, Bethesda, including Glen Echo and Somerset towns and part of Garrett Park town.....	3,217	2,027	1,143
Garrett Park town (part of).....	74	—	—
Glen Echo town.....	203	—	—
Somerset town.....	173	—	—
District 8, Olney, including Brookeville town.....	2,826	3,321	3,216
Brookeville town.....	160	158	—
District 9, Gaithersburg, including Gaithersburg town.....	2,623	2,383	2,240
Gaithersburg town.....	625	547	—
District 10, Potomac.....	1,329	1,630	1,422
District 11, Barnesville.....	1,835	1,685	1,870
District 12, Damascus, including Damascus town.....	1,809	1,770	1,522
Damascus town.....	170	148	—
District 13, Wheaton, including Kensington town and part of Takoma Park town.....	5,107	3,943	2,550
Kensington town.....	689	477	—
Takoma Park town (part of).....	1,159	756	164
Total for Takoma Park town in district 13, Montgomery County, and district 17, Prince Georges County.....	1,242	756	164

Table No. 7.—Division of population according to residence.

	In 1910.		In 1900.	
	Population.	Per cent.	Population.	Per cent.
Town.....	2,340	7.3	1,800	6.1
Village.....	2,611	8.1	1,889	6.2
Rural.....	27,138	84.6	20,696	87.7
Total.....	32,089		30,451	

TABLE No. 8.—*Division of population according to residence, omitting districts 7 and 13.*

	In 1910.		In 1900.	
	Population.	Per cent.	Population.	Per cent.
Town.....	1,181	5.0	1,110	4.5
Village.....	1,472	6.2	1,342	5.5
Rural.....	21,112	88.8	22,029	90.0
Total.....	23,765		24,481	

TABLE No. 9.—*Denominational strength.*

	Churches	Buildings	Ministers	Members	Value of property.
Presbyterian, U. S. A.....	9	8	6	815	\$67,500
Methodist Episcopal.....	17	16	6	1,346	45,000
Protestant Episcopal.....	16	16	11	1,043	106,400
Baptist.....	8	8	2	570	36,300
Methodist Episcopal South.....	17	17	7	1,709	65,348
Methodist Protestant.....	4	4	2	372	10,400
Presbyterian, U. S.....	2	2	1	113	16,300
Seventh Day Adventists.....	2	1	0	400	
Friends.....	2	2	0	201	6,500
Christian.....	2	2	1	80	9,000
Lutheran.....	1	1	1	40	3,000
Free Methodist.....	2	2	1	79	1,000
Primitive Baptist.....	3	3	2	63	3,500
Christian Scientists.....	1	0	0	7	
Catholic.....	9	9	5	2,707	
<i>Colored churches.</i>					
Baptist.....	7	7	4	200	2,660
Methodist Episcopal.....	21	21	9	1,467	28,700
African Methodist Episcopal.....	9	7	5	305	5,800

TABLE No. 10.—*The cost of the church and the cost of the school.*

	Churches.	Schools.
<i>Protestant white churches and schools:</i>		
Total amount invested in property.....	\$304,757.00	\$155,050.00
Interest on this investment at 6 per cent.....	\$21,885.42	\$9,303.00
Total cost of maintenance.....	\$326,642.42	\$164,353.00
Total number days in use per year—aggregate.....	4,216	14,288
Actual cost per day in use, per church or school.....	\$15.71	\$7.48
Cost per day—rent equivalent of interest on property.....	\$5.19	\$0.67
Total cost per day in use, per church or school.....	\$20.90	\$8.15
<i>Colored churches and schools:</i>		
Total amount invested in property.....	\$37,280.00	\$10,750.00
Interest on this investment at 6 per cent.....	\$2,235.60	\$645.00
Total cost of maintenance.....	\$39,515.60	\$11,395.00
Total number days in use per year—aggregate.....	1,865	4,200
Actual cost per day in use, per church or school.....	\$4.35	\$2.71
Cost per day—rent equivalent of interest on property.....	\$1.19	\$0.15
Total cost per day in use, per church or school.....	\$5.54	\$2.86

† Benevolences excluded.

Blanks used in collecting data relative to the schools and the churches.—The school blanks were filled by the school-teachers. The investigators, however, visited the majority of schools in the county. The blanks for the opinions of the heads of families were distributed and re-collected by the teachers. The church blanks were filled by the pastors of the various churches, assisted by the investigators.

SCHOOL BLANK.

No. of school.....; name.....; location (distance from nearest town).....
Principal or teacher's name and address.....

1. MATERIAL EQUIPMENT.

a. Building.

- (1) Material (frame, brick, or stone).....
- (2) Number of rooms.....; if 4 rooms or less, answer the following questions:
Dimensions, 1....., 2....., 3....., 4.....
Square feet of window surface, 1....., 2....., 3....., 4.....
Square feet of blackboard surface, 1....., 2....., 3....., 4.....
Height of blackboard from floor, 1....., 2....., 3....., 4.....
Color of walls, 1....., 2....., 3....., 4.....
What decorations are there? 1....., 2....., 3....., 4.....
Desks, single or double, 1....., 2....., 3....., 4.....
Desks, adjustable, 1....., 2....., 3....., 4.....
- (3) Lighting, from one side....., from two or more sides..... From what side do pupils get light? Right....., left....., both.....
- (4) Heating, unjacketed stove, jacketed stove, or furnace.....
- (5) Are seating facilities ample?.....
- (6) Globe, maps, and charts.....; musical instrument.....
- (7) Cloakroom.....; teacher's room.....
- (8) Water supply, well, filtered cistern, or unfiltered cistern.....
- (9) Toilets, outside or in.....; sanitary or insanitary.....; decently placed.....
- (10) Other outbuildings.....

b. Grounds.

- (1) Size (acres).....; fenced.....; hilly, rolling, or level.....; good walks.....; trees.....
- (2) Flower beds.....; vegetable garden.....
- (3) Play apparatus.....; Nation's flag.....

c. Value of buildings and grounds.....

2. TEACHING FORCE.

a. Number, male.....; female.....

b. Qualifications (if there is more than one teacher answer here for principal only, and for the others use the reverse side of sheet).

- (1) Academic training (grade school, high school, normal, college, summer school, correspondence school).....; diploma held.....
- (2) Certificate held.....
- (3) Number of years experience.....; how many different positions held during last five years?.....; how long in present position?.....; does he or she intend to make teaching a permanent profession?.....

c. Salary (for this position).

- (1) One year ago, monthly.....; yearly.....
- (2) Now, monthly.....; yearly.....

d. Number of teachers' institutes attended during the year.....

3. PUPILS.

a. Enumeration, male....., female....., total.....

b. Enrollment, male....., female....., total.....

c. Number of pupils in each grade and average attendance:

Grade I—Enrollment, male..... female..... average attendance.....
 II—Enrollment, male..... female..... average attendance.....
 III—Enrollment, male..... female..... average attendance.....
 IV—Enrollment, male..... female..... average attendance.....
 V—Enrollment, male..... female..... average attendance.....
 VI—Enrollment, male..... female..... average attendance.....
 VII—Enrollment, male..... female..... average attendance.....
 VIII—Enrollment, male..... female..... average attendance.....

d. Number of graduates last year, male..... female..... number of these who
 have gone to higher schools, male..... female.....

e. Organizations in the school, names..... membership.....

f. Average distance from home to school..... means of transportation.....

4. STUDIES.

a. Length of the year's session in days.....

b. Number of recitations per teacher per day..... average length of the recitation
 period.....

c. To what extent are the following studies taught?

(1) Nature study..... (4) Manual training.....
 (2) Elementary agriculture..... (5) Music.....
 (3) Domestic science..... (6) Drawing.....

5. LIBRARY.

a. Number of volumes..... total value.....

b. Amount spent this year.....

c. Is the selection one advocated by the State board of education?..... if not, what
 is the character of the selection?.....

d. What proportion of the pupils use the books?.....

6. THE SCHOOL AS A SOCIAL CENTER.

a. Number of entertainments given a year..... character of the entertainments.....
 to what extent attended by the school patrons?.....

b. Other purposes for which the building is used.....

7. MISCELLANEOUS.

a. Is the school affected by parochial or private schools?.....

b. Remarks.....

PATRONS' BLANK.

1. What, in your opinion, are the principal weaknesses of the country school?.....

2. Do the schools need a different course of study?.....

3. How may they serve the community other than as an ordinary day school for
 children?.....

4. Do you think consolidation of schools and transportation of pupils in school
 wagons feasible?.....

5. Are the schools as they now are satisfactorily progressive?.....

6. What do you suggest to improve them?.....

1912

Sign.....

CHURCH BLANK.

Name of Church..... Denomination.....
 Location..... County..... State.....
 Filled out by..... Address..... Date.....

1. Number of preaching Sundays a month.....

2. Membership—

10 years ago.....

5 years ago.....

(If you can not give approximate figures, state whether membership was greater or less ten and five years ago.)

Now.....

Male.....

Female.....

Total.....

3. Additions to this church during the last church year —

By confession.....

By letter.....

Total.....

4. Attendance on an average Sunday

Morning.....

Evening.....

5. Sunday school—

(a) Number of months a year Sunday school is held.....

(b) Total membership.....

(c) Average attendance.....

(d) Membership in—

Cradle roll.....

Primary department.....

Junior department.....

Intermediate department.....

Senior department.....

Total.....

(e) Number of teachers.....

Male.....

Female.....

Total.....

(f) Is there a teachers' training class?

(g) Does the Sunday school do any mission or charity work?.....

6. Organizations—

Young people's.....

Number.....; membership.....

6. Organizations—Continued.

Women's.....

Number.....; membership.....

Men's.....

Number.....; membership.....

Others.....

Number.....; membership.....

7. Annual expenses—

Salary of pastor.....

10 years ago.....

5 years ago.....

Benevolences.....

Sunday school.....

Other expenses.....

Total.....

8. Church property—

Value.....

Encumbrances.....

Equipment —

Number of rooms.....

Furniture, condition.....

Stove or furnace.....

Grounds —

Acres.....

Fenced?.....

Trees?.....

Flower-beds?.....

Cemetery in connection?.....

Outbuildings?.....

9. Is there a parsonage?.....

How many rooms?.....

10. The pastor—

(a) What other source of income has the pastor?.....

(b) How many children has he?...

(c) Does he carry life insurance?...

(d) How many volumes in his library?.....

(e) Does he reside in town or country?.....

(f) Within his parish?.....

11. Pastor's name and address.....